



BINDING SERVICES
Tel +44 (0)29 2087 4949
Fax +44 (0)29 20371921
e-mail bindery@cardiff.ac.uk

**FORMULATING A PRINCIPAL PERFORMANCE
MANAGEMENT SYSTEM FOR PRIMARY AND JUNIOR
HIGH SCHOOLS IN TAIWAN**

by

Hsin-Hui Cheng

**A thesis submitted in fulfilment of the requirements for the
degree of Doctor of Philosophy**

School of Social Science (Education)

Cardiff University

December 2006

UMI Number: U584130

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI U584130

Published by ProQuest LLC 2013. Copyright in the Dissertation held by the Author.
Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against
unauthorized copying under Title 17, United States Code.



ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

Abstract

In globally competitive circumstances promotion of education quality has become regarded as a crucial national activity with New Public Management ideas gaining prominence in school management policies. Head teachers or principals are now seen as critical leaders in schools and increasing their capabilities for professional leadership and management and performance through principal performance management (PPM) has received increasing attention.

In Taiwan, following recent, massive political and social change, educational reforms have reshaped a new context in which principals have encountered a great deal of challenge and role change. Issues of PPM have rarely been explored in Taiwan. The purpose of the study is, hopefully, to formulate a PPM system from literature review and empirical research to provide reference points for its policy makers. The former was mainly focused on conceptual analysis of PPM, including the possible bearing of philosophical paradigms and psychological and administrative theories and the experience of PPM conducted in Britain and New Zealand, as well as its precursor in principal appraisal in Taiwan. From these a possible PPM model and its elements have been delineated. The latter was conducted by methodological triangulation which combined questionnaire survey of 392 educational administrators and principals of primary and junior high schools in 23 counties/cities in Taiwan, followed by in-depth interviews with 24 stakeholders chosen purposively from three counties/cities.

It is suggested that Taiwanese administrators and principals would generally welcome a well planned, cyclical PPM system designed to help principals promote their professional capabilities and performance whose rationale was improvement-orientated accountability emphasising consensual objectives, cooperative partnership, shared commitment and sustainable development toward integrating individual and school objectives and the professional development and performance of principals. Suggestions are put forth to policy makers for setting up a practicable PPM policy aimed at integrating the HRM of principals and promotion of educational quality.

Acknowledgements

In doing this research I was guided during its very early stages by Professor Ray Bolam and for its remainder by Professor Brian Davies, without whose patient guidance, constructive critique and valuable support it would not have been completed. My heartfelt thanks go to them both.

Special thanks also go to the Taiwan Ministry of Education and President Z. J. Huang, Vice-Chancellor X. S. Huang and all colleagues of University of Tainan. Without their financial and psychological support it would have been impossible for me to continue. My appreciation must be extended to my research assistant and postgraduate students, who helped me to type and transcribe both questionnaire and qualitative data during the stage of data collection and analysis.

I am also grateful to the expert panel and all study respondents who were involved in both pilot study and main data collection. Without their enthusiastic comment and response the study could never be completed. Several respondents expressed interest in this study, such as also encouraged me to persevere. Much gratitude is also extended to Ms. Sandra Bonney, Ms. Liz Renton, Mr. Steve Donaldson and other members of the Cardiff Social Science School, as well as my best friends: Morgan, Robber and Jack in Penllyn Road and other Taiwanese students. Their concern, love, support and assistance will not be forgotten.

Finally, my deepest indebtedness is to my family, my wife and son. It has not been easy for them to bear the many burdens of the last ten years. I thank them for their endless forgiveness and support even when I fell short of some of my responsibilities.

To my Mom, my wife & Ken

Table of Contents

| | |
|---|--------|
| Declaration..... | i |
| Abstract..... | ii |
| Acknowledgements..... | iii |
| Dedication..... | iv |
| Table of Contents..... | v |
| List of Tables..... | xi |
| List of Figures..... | xii |
| Abbreviations..... | xiv |
| Chapter 1: Introduction..... | 1 |
| 1.1 Research Background and Significance..... | 1 |
| 1.1.1 Increasing emphasis on the roles of principals..... | 3 |
| 1.1.2 Enhancing school accountability..... | 6 |
| 1.1.3 Integrating principals' human resource management..... | 8 |
| 1.1.4 Improving the continuous professional development of principals..... | 9 |
| 1.1.5 Modifying deficiencies in the Taiwanese principal evaluation system..... | 12 |
| 1.1.6 Lack of systematic exploration of PPM system in Taiwan... | 14 |
| 1.2 Research Purposes..... | 16 |
| 1.3 Research Questions..... | 17 |
| 1.4 Overview of Methodology and Scope..... | 17 |
| 1.5 Research Framework..... | 18 |
| Chapter 2: A Conceptual Analysis of PPM..... | 20 |
| 2.1 Introduction..... | 20 |
| 2.2 Definition and Nature..... | 21 |

| | |
|--|-----------|
| 2.2.1 Performance..... | 21 |
| 2.2.2 Management..... | 24 |
| 2.2.3 Performance management for principals..... | 25 |
| 2.2.4 Nature of PPM..... | 28 |
| 2.3 Purpose and Function..... | 30 |
| 2.3.1 Developmental/formative purposes..... | 31 |
| 2.3.2 Accountability/summative purposes..... | 32 |
| 2.3.3 Enlightenment purposes..... | 33 |
| 2.3.4 Functions..... | 33 |
| 2.4 Integration of Different Purposes..... | 35 |
| 2.5 Relationship and Position..... | 37 |
| 2.5.1 The relationship between PPM and PPA..... | 37 |
| 2.5.2 The position of PM in school management system..... | 39 |
| 2.6 Factors Influencing Principal Performance..... | 42 |
| 2.6.1 Individual factors..... | 42 |
| 2.6.2 Internal school factors..... | 45 |
| 2.6.3 External school factors..... | 48 |
| 2.7 Summary..... | 50 |
| Chapter 3: Theoretical Analysis of PPM..... | 51 |
| 3.1 Introduction..... | 51 |
| 3.2 Philosophical Analysis..... | 52 |
| 3.2.1 Positivist paradigm..... | 54 |
| 3.2.2 Naturalistic paradigms..... | 55 |
| 3.2.3 Critical paradigms..... | 57 |
| 3.2.4 Post-structuralism/post-modernism..... | 59 |
| 3.2.5 Possible implications of different philosophical paradigms | 64 |
| 3.2.6 Summary..... | 74 |

| | |
|--|-----|
| 3.3 Psychological Analysis..... | 76 |
| 3.3.1 Behaviourism..... | 76 |
| 3.3.2 Cognitive theory..... | 78 |
| 3.3.3 Humanistic theory..... | 81 |
| 3.3.4 The implications of motivation theories for PPM..... | 83 |
| 3.3.5 Summary..... | 99 |
| 3.4 Administrative Analysis..... | 100 |
| 3.4.1 The three phases of administrative theory..... | 101 |
| 3.4.2 Recent trends in administrative and management theory... | 114 |
| 3.4.3 Summary..... | 124 |
| Chapter 4: PPM policy in the UK, New Zealand and Taiwan... | 126 |
| 4.1 Introduction..... | 126 |
| 4.2 PPM Policy in the UK..... | 127 |
| 4.2.1 Development background of PPM policy processes..... | 127 |
| 4.2.2 Policy contents and practice..... | 131 |
| 4.2.3 Effects and comments..... | 138 |
| 4.3 PPM Policy in New Zealand..... | 143 |
| 4.3.1 Development background of PPM policy processes....., | 144 |
| 4.3.2 Policy contents and processes..... | 152 |
| 4.3.3 Effects and comments..... | 157 |
| 4.4 Principal Appraisal Policy in Taiwan..... | 159 |
| 4.4.1 Development background of PPM policy processes..... | 160 |
| 4.4.2 Situation of principal appraisal in local counties/cities..... | 167 |
| 4.4.3 Effects and comments..... | 176 |
| 4.5 Summary..... | 178 |

| | |
|---|------------|
| Chapter 5: Models and Elements of PPM systems..... | 180 |
| 5.1 Introduction..... | 180 |
| 5.2 Models of PPM Systems..... | 180 |
| 5.2.1 General PM models..... | 181 |
| 5.2.2 Possible PPM models..... | 188 |
| 5.3 Elements of Three Stages in PPM Systems..... | 195 |
| 5.3.1 Policy formulation and preparation..... | 195 |
| 5.3.2 Operation processes..... | 199 |
| 5.3.3 Outcome treatment..... | 204 |
| 5.4 Summary..... | 207 |
| Chapter 6: Research Design and Methodology..... | 209 |
| 6.1 Introduction..... | 209 |
| 6.2 Research Questions..... | 209 |
| 6.3 Research Design and Framework..... | 211 |
| 6.3.1 Research design..... | 211 |
| 6.3.2 Research framework..... | 213 |
| 6.4 Questionnaire Survey..... | 215 |
| 6.4.1 Population and sample..... | 215 |
| 6.4.2 Questionnaire design..... | 218 |
| 6.4.3 Validity and reliability..... | 220 |
| 6.4.4 Methods of data analysis..... | 222 |
| 6.5 Interviews..... | 223 |
| 6.5.1 Sample selection for interview..... | 223 |
| 6.5.2 Question design..... | 225 |
| 6.5.3 Interview procedures..... | 226 |
| 6.5.4 Validity and reliability..... | 227 |
| 6.5.5 Methods of interview data analysis..... | 229 |

| | |
|---|------------|
| 6.6 Ethical Considerations..... | 232 |
| 6.7 Summary..... | 233 |
| Chapter 7: Results of Data Analysis..... | 235 |
| 7.1 Why We Need a PPM System and How Should We Plan It..... | 235 |
| 7.1.1 Why we need them..... | 236 |
| 7.1.2 The purposes of PPM systems..... | 241 |
| 7.1.3 Length of cycles..... | 244 |
| 7.1.4 Planning advisory functions..... | 245 |
| 7.1.5 Professional standards for principals..... | 255 |
| 7.1.6 The key performance areas of principals..... | 256 |
| 7.1.7 Appraisal standards..... | 258 |
| 7.1.8 Preparatory data collection methods and tools..... | 260 |
| 7.1.9 Other preparatory work and ancillary measures..... | 261 |
| 7.2 How Implementation Should be Carried Out..... | 262 |
| 7.2.1 Performance agreement..... | 263 |
| 7.2.2 Performance objective setting..... | 266 |
| 7.2.3 Counselling and feedback..... | 271 |
| 7.2.4 Performance appraisal..... | 277 |
| 7.2.5 Performance review meetings..... | 282 |
| 7.2.6 Performance appraisal reports..... | 284 |
| 7.2.7 Confidentiality and due process..... | 286 |
| 7.3 Analysis of the Outcome Treatment..... | 290 |
| 7.3.1 Setting annual improvement objectives..... | 291 |
| 7.3.2 Principal profession development..... | 292 |
| 7.3.3 Principal performance rewards..... | 295 |
| 7.3.4 Principal selection..... | 299 |
| 7.3.5 Providing for performance improvement..... | 301 |

| | |
|--|------------|
| 7.4 Summary..... | 302 |
| Chapter 8: Conclusions and Recommendations..... | 305 |
| 8.1 Introduction..... | 305 |
| 8.2 Conclusions (What the Study Found) | 307 |
| 8.2.1 Literature review..... | 307 |
| 8.2.2 Empirical research..... | 314 |
| 8.3 Recommendations..... | 317 |
| 8.3.1 Recommendation for policy makers..... | 317 |
| 8.3.2 Recommendations for further research..... | 321 |
| 8.4 Limitations of the Study..... | 322 |
| English Bibliography..... | 325 |
| Chinese Bibliography..... | 351 |
| Appendix A: Survey of Formulating a Practical Principal Performance Management System..... | 365 |
| Appendix B: Response and Treatment of Expert Panel on Pilot Test | 371 |
| Appendix C: Interview Guidelines for Principals and Administrators... | 372 |
| Appendix D: Statement of Agreement for Interview..... | 374 |
| Appendix E: Data Analysis Results I : Mean, T-test Scores and One-way ANOVA of Item Responses..... | 375 |
| Appendix F: Data Analysis Results II : One-way ANOVA and Chi-square Test: Comparison of responses among different current posts..... | 382 |

List of Tables

| | |
|---|-----|
| Table 1.1 The main areas of research on principal leadership in relation to teachers and schools in recent decades in Taiwan..... | 4 |
| Table 2.1 Purposes of PPM..... | 30 |
| Table 2.2 Compare the differential between PPM and PPA..... | 38 |
| Table 3.1 How the four paradigms would lead us to conceive of PPM system..... | 67 |
| Table 3.2 Four philosophical paradigms on reality..... | 74 |
| Table 3.3 The structures of three motivation content theories..... | 85 |
| Table 3.4 Four types of attribution and their attributes in Weiner's attribution theory..... | 98 |
| Table 3.5 The process and characteristics of TQM development..... | 116 |
| Table 3.6 Characteristics of HRM and PM..... | 119 |
| Table 4.1 Situations of planning an appraisal for principals in 23 counties/cities..... | 169 |
| Table 4.2 Policy planning of principal appraisal in nine counties/cities... | 170 |
| Table 4.3 Implementation process of principal appraisal in nine counties/cities..... | 174 |
| Table 4.4 Outcome treatment of principal appraisal in nine counties/cities..... | 176 |
| Table 5.1 Spangenberg's integrated performance management system..... | 186 |
| Table 5.2 Principals' professional capability standards, Britain and Taiwan..... | 199 |
| Table 6.1 Educational administrator and principal populations and samples for the questionnaire survey..... | 217 |
| Table 6.2 Questionnaires returns, by respondent category..... | 218 |
| Table 6.3 Questionnaire stages, issues and questions..... | 219 |
| Table 6.4 Personal background of interviewees (24 cases)..... | 225 |

List of Figures

| | |
|--|-----|
| Figure 1.1 Research framework of the study..... | 19 |
| Figure 2.1 Position of PM in SMS..... | 40 |
| Figure 2.2 Position of PM in HRM..... | 41 |
| Figure 2.3 Factors influencing principal performance..... | 43 |
| Figure 2.4 A typology of work teams..... | 47 |
| Figure 3.1 Framework of satisfaction-progression and frustration-regression components of ERG theory..... | 87 |
| Figure 3.2 The two factor structure of Motivation-Hygiene theory..... | 89 |
| Figure 3.3 Correlation of expectancy with instrumental values in motivation expectancy theory..... | 90 |
| Figure 3.4 Relationship among major constructs in expectancy theory of motivation..... | 92 |
| Figure 4.1 Responsibilities for delivering the school improvement partner programme..... | 136 |
| Figure 4.2 Head teacher performance management cycle..... | 138 |
| Figure 4.3 The organisation chart of New Zealand education administration system..... | 149 |
| Figure 4.4 The positioning and operational process of school charter.... | 151 |
| Figure 4.5 The operational process of the PPM system in New Zealand | 156 |
| Figure 4.6 Current educational administration system of Taiwan..... | 161 |
| Figure 5.1 Bredrup's organization performance management model..... | 182 |
| Figure 5.2 Amstrong's integrated performance management system..... | 183 |
| Figure 5.3 Storey and Sisson's integrated performance management system..... | 184 |
| Figure 5.4 McAfee and Champagene's integrated performance management system..... | 185 |

| | |
|--|-----|
| Figure 5.5 Integrated performance management system..... | 188 |
| Figure 5.6 Four types of performance management..... | 189 |
| Figure 5.7 Types of PPM models..... | 190 |
| Figure 5.8 Self- development orientation PPM model..... | 192 |
| Figure 5.9 Developmental orientation PPM model..... | 193 |
| Figure 5.10 Accountability orientation PPM model..... | 194 |
| Figure 6.1 Research framework of formulating a PPM system..... | 214 |

Abbreviations

| | |
|-------|---|
| ACAS | Advisory Conciliation and Arbitration Service Report |
| AG | Appointed governors |
| BOE | Bureau of Education |
| CBT | Council for British Teachers |
| CEA | Cambridge Education Association, now renamed Cambridge Education, CE |
| CEREY | Committee of Education Reform for the Executive Yuan |
| CPD | continuous professional development |
| DES | Department of Education Science |
| DfEE | Department for Education and employment |
| DfES | Department for Education and Skills |
| EA | External adviser |
| EdA | education administrators |
| GB | Governing body |
| HIP | Headteacher Induction Programme |
| HMI | Her Majesty's Inspectors |
| HRM | Human resource management |
| JHSP | junior high school principals |
| KPA | key performance areas |
| LEA | local education authority |
| LPSH | Leadership Programme for Serving Headteachers |
| MOB | management of objectives |
| MOE | Ministry of Education |
| NCSL | National College for School Leadership |
| NPM | New public management |
| NPQH | National Professional Qualification for Headship |
| NSG | National Steering Group |

| | |
|---------------|--|
| NSH | National Standards for Headteachers |
| OBM | Organisational behaviour modification |
| Ofsted | Office for Standards in Education |
| PC | Parents Committees |
| PM | Performance management |
| PPA | Principal/Headteacher performance appraisal |
| PPM | Principal/Headteacher performance management |
| PriSP | primary school principals |
| PSC | Principal Selection Committee |
| QA | Quality assurance |
| QC | Quality control |
| SIP | School Improvement Partners |
| SMART | specific, measurable, achievable, relevant and time-related |
| TQM | Total quality management |
| TTA | Teacher Training Agency. now renamed Training and Development Agency for Schools, TDA |

Chapter One

Introduction

1.1 Research Background and Significance

The growing ascendancy of New Public Management (NPM) ideas has triggered increased government scrutiny of educational processes and attempts at their reengineering through reforms which emphasise putative links between effective management of schools and improvement in their performance. At their core they regard 'new management' as a key tool in raising the performance standards of organisations, for example, by removing traditional bureaucratic practices, emphasising empowerment, specifying targets to be pursued, implementing performance management (PM), adopting a market-orientation, emphasising customer-focused systems of quality improvement and using the accountability of contractors to highlight outcome-based conceptions of management (Amstrong, 1998; Box, Marshall, Reed and Reed, 2001). In many countries since the 1980s, such as the United Kingdom, America, New Zealand and Australia school-based management aimed at decentralising decision-making power from local government to schools, increasing the power of the latter in the hope of raising quality and effectiveness, has been given impetus. Influenced by NPM conceptions, governments have set up a variety of mechanisms of educational accountability, such as school performance management policies to promote professional capabilities and skills among principals and teachers with the ultimate aim of improving the achievement of students (Middlewood, 2002). Even in Taiwan, central and local governments have set policies in train since the 1990s which have included reengineering, privatisation, contracting-out,

local decentralisation of management, performance management and public sector performance rewards (Central Personnel Administration, Executive Yuan, 2004), all of them reflecting the influence of NPM thinking on strengthening effectiveness, efficiency and productivity. Although the objects, purposes and operating processes of schools have not traditionally been the same as those of industry and commerce, or even other public sector institutions which strive for customers, visible outcomes/products and efficiency, for schools having traditionally laid greater emphases on the requirements of professional autonomy, raising their quality and performance has now also become part of the same high order of public expectation..

To raise and assure the quality of schooling is frequently the core purpose of educational reform. Principals are widely held, particularly by governments, to be vital leaders of effective schools, whose performance and management skills are crucial to their effectiveness. Concomitantly, official belief increasingly tends to be that their performance should be managed systematically toward improved capability and achievement of their duties. Given this context of governmental attachment to such processes, there would appear to be six reasons for pursuing research on formulating a practical principal performance management (PPM) system in Taiwan: increasing emphasis on the centrality of school principal roles; enhancement of school accountability; the need for integration of the human resource management (HRM) of principals; improving their continuous professional development (CPD); remedying the deficiencies of existing principal evaluation systems; and lack of existing systematic exploration of such systems.

1.1.1 Increasing emphasis on the roles of principals

Greater emphasis on the roles of principals has engendered increased belief in the necessity of implementing PPM systems in schools. It might be contended that, in fact, few people doubt or deny that principals play important roles in leading effective schools. Most scholars and experts, from a variety of theoretical and practical perspectives, would tend to accept that, within existing constructions of schooling, principals are key persons in ensuring 'effective schools' (Valentine and Bowman, 1991). The mantra '(A)s is the principal, so the school' has mutated into '(A)s effective principals, so effective schools', summarising dominant perspectives as to their importance. Effective principals are depicted as performing their professional leadership and management tasks so as to: facilitate development of whole school vision; enhance administrative effectiveness; promote the quality of teaching and learning; and raise student standards. Much research has set out to indicate that principal leadership patently influences the quality of school management (Andrews and Soder, 1987; Bossert, 1982; Duke, 1987; McMahon, 2003; Sergiovanni, 1995; Thomas and Vomberg, 1991). Effective leadership of principals has been held to profoundly affect teachers' teaching and student performance (Duke and Stiggins, 1985; Ginsberg and Thompson, 1992; Glasman, 1992; Hallinger and Murphy, 1985; Snyder and Ebmeier, 1992; Stufflebeam and Nevo, 1993). In Taiwan the national data base of PhD and Masters' dissertations in recent decades reveals abundant research (see Table 1.1) concerning principal leadership which claims to confirm that it has significant, positive relationship with and effect on teacher efficacy, teaching effectiveness, work motivation, teacher morale, work involvement, organisational commitment, culture and climate, learning and execution and citizenship behaviours, work satisfaction, community participation, school

effectiveness, quality management and education performance.

Table 1.1 The main areas of research on principal leadership in relation to teachers and schools in recent decades in Taiwan

| Principal leadership in relation to | Dissertations |
|---------------------------------------|--|
| Teachers' self efficiency | H. Z. Lin (2002); X. K. Zhang (2003) |
| teaching efficiency | M. X. Chen (2002); M. Y. Chen (1997); Z. K. Jiang (1994); H. H. Lin (2002); X. B. Li (2000); Y. Z. Yang (2003); B. J. Zhang (1997) |
| work motivation | L. M. Bai (1997) |
| teacher morale | S. Y. Xu (2000); X. R. Ye (2002) |
| work involvement | D. X. Chen (2003); L. M. Huang (2003) |
| organisational commitment | X. X. Chen (2003); Y. Z. Peng (1997); S. H. You (2002) |
| organisational citizenship behaviours | B. X. Huang (2003); P. Y. Xie (1999) ; J. F. Zeng (2003) |
| work satisfaction | Q. R. Chen (2000); D. C. Liang (2001); M. Z. Luo (2002); Z. Z. Zhu (2002) |
| community participation | C. Y. Huang (1998); Y. Z. Wang (2003) |
| school effectiveness | J. X. Cai (1999); Z. X. Cai (2003); F. M. Chen (2003); J. Y. Chen (2003); S. C. Chen (2000); H. Z. Lin (2001); J. Y. Lin (1998); R. Z. Ma (2003); H. Y. Wu (1995); M. X. Wu (2000); D. B. Xue (2003); Z. F. Zeng (2003); C. J. Zhang (1996); S. G. Zhang (2003); H. Y. Zhang (2001); Q. X. Zhang (1995) ; Y. M. Zheng (2004) |
| organisational culture and climate | W. Y. Chen (1995); S. F. He (1995) ; Q. X. Zhang (1995); Y. F. Zhang (2001) |
| organisational learning and execution | Y. Y. Lin (2003); Z. R. Zhang (2001) |
| quality management | Z. H. Li (2003) |
| education performance | Z. W. Fan (2001); Y. M. Huang (1999) |

If we synthesise findings from both Western and Eastern research activity, we see that they seek to reaffirm that the roles of principals who supply powerful leadership and management are vital in influencing school effectiveness. If such claims are accurate, paying attention to their performance and actively helping them, where possible, to enhance their capabilities, while monitoring their actions so as to be able to gauge whether they have acted successfully, should engage our attention. An agreed, appropriate PPM system should be capable of attending to these matters (Stufflebeam and Nevo, 1993).

In Taiwan, principals have in the past tended to function as administrative managers, mostly acting as executives, closely following government direction. However, in the last decade their roles have been seen to be shifting in the direction of leadership required by changed policies on curriculum and deregulation and transfer of decision making power from central government to local government and schools and from principals to teachers and parents. Schools now have more power of self management on curriculum and personnel decisions. Principals have to account for strategic planning. Participatory management has become the normally expected style; principals are required to share power with school teachers and parents in curriculum planning decisions and personnel selection. From time to time they must negotiate important school policies, especially those concerning teacher rights, with teacher unions at school level. All of these changes have brought considerably more challenges, with new and complicated role expectations, to principals than ever before. Unavoidably, they tend to encounter more dilemmas and ethical conflicts (Cuban, 1995; Dening and Quinn, 2001; Dilmmock, 1996; Goodwin, Cunningham and Childress, 2003; N. Y. Huang, 2004; M. D. Lin, 2002; Walker, 2000; Walker and Dimmock, 2000; Q. S. Wu, 2001). Moreover, their position atop school bureaucratic organisations

continues to leave them in positions of isolation during their careers (Hewton and West, 1992; Mercer, 1996), in need of continual support and feedback from external advisers so as to help them adapt to changing environments and facilitate effective management behaviour. Planning a sound system of principal performance management which helped direct principals toward achievement of annual targets, while providing them with supportive professional partnership is, arguably, made even more imperative by such circumstances.

1.1.2 Enhancing school accountability

Arguments that systematically conducting principal performance management can facilitate school accountability and raise student achievement standards are frequently underpinned by economistic rationalisations that educational quality is intimately connected to international competitiveness, particularly, in an era of globalisation when it is increasing in intensity (Middlewood, 2002). Cuff, Sharrock and Francis (1998) indicated that in post-information technology society changes occur in the structure of production in which knowledge has not only altered its position but assumed predominant status. The era of the 'knowledge economy' has become part of popular discourse in modern society. As knowledge acquisition is dependent on education, improving the latter's structures so as to raise its quality has become a core mission of governments in recent decades. However, accompanying values of equity and emphasis on an open society render the promotion of mass knowledge not only an economic but also a political problem (Cuff, Sharrock and Francis, 1998). Expanded government involvement and intervention has become regarded as reasonable, even inevitable. Especially when education's quality fails to meet mass expectation, educational problems

become issues of politics. Many educational reform policies put into action by governments to improve student achievement, including movements toward educational accountability in the 1980s were officially justified as necessary remediation for many failed education/teaching programmes (D. F. Chang, 2004, Chang and Li, 2002; Wu, Huang and Xu, 2002). Its key terms, for example, standards, assessment, evaluation, outcomes and performance became the stuff of accountability discourse. In the 1990s, following the rise to fashion of educational decentralisation, we were provided with the discourse of restructuring schools, school-based management, charters and school choice. Within it, the main, official purpose of decentralisation was not simply to empower schools but to ensure accounting of their responsibilities for raising student performance. Its direction flowed from government to schools, from administrators to principals and teachers. The techniques adopted shifted gradually from performance appraisal to performance management and their purposes and emphases varied from individual accountability to combine both accountability and development purposes. Target setting also shifted from merely focusing on achieving performance of principals to embrace their professional development.

In Taiwan educational environments have been changing since the end of martial law was declared in 1987. A more open society and its accompanying education policies that have altered traditionally standardised and uniform education policies by, for example, amending the nine-year curriculum guideline, opening textbook markets for private publishers and enabling schools to employ teachers directly. However, conditions of such increased educational autonomy, diversity and competition, just as when capitalism characteristically strives for free competition, will normally tend to engender problems of inequality of educational opportunity and greater stratification and

differentiation. That students might not necessarily enjoy the benefits of decentralisation policies is a matter which should be of concern to governments actively pursuing them, particularly as distinctions between 'public' and 'private' forms of governance and provision, complexity take more particularistic forms (Dale, 1997). While sound PPM systems might facilitate principals setting specific school targets annually and managing their performance systematically in ways that would mitigate some of the possible undesirable effects of current change, we might also argue that this might also need to be accompanied by more profound insight on their part on some of the less overt and acknowledged aspects of policy intentions and change.

1.1.3 Integrating principals' human resource management (HRM)

In recent decades in both America and the UK human resource management (HRM) policies and programmes have been set up, aimed at enhancement of the leadership and management capabilities of principals/heads. To promote the manpower quality of principals, national standards for headteachers, professional qualifications, induction and in-service training programmes, performance management, and national colleges for school leadership have been funded and introduced.

In contrast in Taiwan there have been few policies that have really focused on principals' professional development and those that have lacked deliberate, planned HRM programmes, changing principal selection systems but ignoring their training and qualification processes (X. Y. Cai, 2000; Q. H. Feng, 2002; W. L. Lin, 1999; H. Q. Lin, 2000; A. M. Li, 2002; Wang and Xie, 2002; W. Q. Xie, 1999; D. F. Zhang, 2002). Although principals are required to be appraised only at the end of their four year cycle of tenure, appraisal systems

still differ between local counties (Cheng, 2002a, 2003) and their deficiencies have been unexpected (Cheng, 2002c). Appraisal results are referred only to Principal Selection Committees (PSCs) in some counties/cities and focus on summative, not formative, purposes. For such reasons it is, arguably, not only necessary to establish a HRM system for principals in order to promote their manpower quality but to set up a PPM system to provide feedback, assure target achievement to integrate their HRM.

If organisations rely on high quality manpower to assist them in attaining their objectives effective human resource recruitment, employment and management becomes the key to their development. Within human resource management that covers human planning, recruitment, appointment, maintenance, appraisal, compensation, training and development, promotion, and award (Lunenbury and Ornstein, 2000; Smith, 2001; Webb and Norton, 1999), performance appraisal can be used as the scrutinising tool for other functions. It can help organisations to plan future manpower, assess whether recruitment processes are successful, provide reasonable compensation to motivate employees, judge what training courses are necessary for individual persons and promote employee potential (Q. R. Lin, 1998; D. Z. Qi, 1999; H. C. Zhang, 2000). However, performance appraisal is merely a means and not an end; target achievement remains its ultimate purpose.

1.1.4 Improving the continuous professional development of principals

The fourth reason for introducing a PPM system could be argued to be that it can satisfy needs for principals' continuous professional development throughout their career, entailing successive processes from preparing individuals to become principals, helping to sustain their performance, to

eventually facilitating exit from their positions. Principals' duties, roles and obligations alter in time, space and circumstance and they encounter continually transforming processes in their physical, mental, and social lives. Normally principal professional careers can usefully be divided into six, usually successive stages: (1) career exploration, before preparing to become a principal; (2) adaptation, roughly the first three years in the job; (3) transition, where they tend to encounter two different kinds of career choices, successful principals entering a period of stabilisation, unsuccessful ones becoming flat, conservative, withdrawn or exiting, though some, given assistance, might be enabled to enter; (4) maturation, a stage where they may completely control their career with respect of a variety of duties and challenges, going on to; (5) a professional stage when they are not only equal to their jobs but adequately display their leadership and educational decision making abilities, finally reaching; (6) a mentor stage, where they are capable not only of successfully exhibiting performance in their profession but can act as mentors. The actual events that Taiwanese principals may now go through in their careers can be expected to encompass preparation, pre-service training, qualification, selection, appointment, induction, in-service training and development, appraisal, reassignment, promotion and exit (M. D. Lin, 2002). Each develop their professional careers in different ways and only few may reach what we have termed the mentor stage, though many may become 'professional' principals, provided they acquire support that appropriately enhances their capabilities.

However, in Taiwan, principals have not to date experienced such trajectories with any degree of consistency and adequacy. School senior deans who are minded to become principals must prepare themselves to take an examination organised by their local government authority, where they will

compete with others, but for which there is no adequate preparation, curriculum design or qualification/test procedure. 'Winners' join loosely planned pre-service training courses of 4-10 weeks duration and undertake practical training. Principals who have accomplished pre-service training receive only certification issued by local government; there is no standardised qualification. Candidates for principalships then apply for selection by principal selection committees (PSCs) set up by local governments but the process is regarded as controversial, marked by excessively subjective judgement and political intervention, resulting in unfair appointments (H. X. Cai, 2000; Chang and Jian, 2001; B. S. Chen, 2001; B. T. Ke, 2001; M. H. Liu, 2002; M. Q. Qin, 2002; Z. M. Tang, 2002; Q. S. Wu, 2002; Wu and Zhang, 2001; M. X. Yang, 2000). Those who are selected for employment in schools for their first tenure, normally of about four years, find that there is no induction system, while incumbent principals sign up for, or are assigned to, inadequately planned, in-service training courses provided by local government which may well fall short of adequate professional standards. Only at the end of their tenure will they receive appraisal or school evaluation, of only a summative kind, designed to provide a basis for their re-selection. Principals whose tenure runs out can apply once to the Selection Committee, either to remain in the same school or transfer to other schools, those re-selected continuing their principal career and unselected principals being either reappointed as teachers, moved to other suitable positions, or retired, often provoking middle career transformation crises. Finally, principals may retire before or on their mandated date.

It is evident that principals at different career stages face distinct events and varieties of demands. All undoubtedly need professional support and consultation in planned ways that coordinate their needs for career

development with the annual objectives of school development plans and performance targets. Given the continuing lack of systematic professional development planning focused on principals' careers in Taiwan, a PPM system that combined these *desiderata* with supportive feedback and appraisal might be argued to be highly desirable.

1.1.5 Modifying deficiencies in the Taiwanese principal evaluation system

Before 1999 school principals were appointed at local governmental level following a series of processes which was prefaced by their examination and pre-service training and followed, after each period of tenure, by reappointment or reassignment. However, in the way that Lord Acton's famous dictum insinuates that 'power tends to corrupt and absolute power corrupts absolutely' (Langlois and McAdams, 1992: 2), political intervention occasionally occurred with respect of such appointments and there was also failure to deal with the inadequate performance of others. Educational reformers sought to alter selection of principals by a single person at the top of local government hierarchies to committees consisting of parents, teachers, administrators and experts and to request that principal performance should be appraised (Committee of Education Reform for the Executive Yuan, 1996).

The evaluation of school principals became mandatory with the amendment of the Compulsory Education Act in 1999. All incumbent principals at the end of their tenure were to be appraised and judged by their PSCs to ensure that their performance has been satisfactory. The evident purpose of such changes in principal selection policy was to enable selection of the most

suitable candidates for each school, weeding out the inadequate. Indirectly it raised the whole issue of principal manpower. Among the outcomes of implementing policies that removed inadequate individuals and enforced the requirement upon all principals to make their decision making processes more transparent, giving more respect to colleagues than formerly, it has been claimed that some negative side effects have been generated, including some collapse of the ethical traditions of mutual respect on campus. Confusing and vulgarising of the role of principals in negotiating processes, inhibiting their action in the interests of avoiding increasing the workloads of teachers and a tendency to adopt interpersonal rather than professional orientations in decision making has been depicted as a degree of pandering to reality rather than being guided by ideals. Even worse, 'election culture' has been claimed to intervene in campus activity, expanding the privileged position of Parents Committees (PCs) in school administration and leading to removal of some excellent principals unwilling to submit to new selection processes (B. S. Chen, 2001; M. X. Liu, 2002; M. Q. Qin, 2002; Z. M. Tang, 2002; Q. S. Wu, 2002; M. X. Yang, 2000), hoping to the cling to the 'old' and its complicated political possibilities. Although these problems and disputes could be solved gradually by changing selection processes and privileging the centrality of principals' appraisal to them, there have been only a few local government authorities which have really taken the results of appraisal as the key point of reference in PSCs judgments (Cheng, 2002a). Left local, different ideas and degrees of value placed on them abound and generate diverse process and practice. Given the summative purpose of principal appraisal, anxiety, stress and threat are still high for those undergoing it. At present it engenders only very limited formative benefits in enhancing principal capabilities and performance. Cheng (2002b) firmly contended that the accountability orientation of principal evaluation in Taiwan could not meet personnel

evaluation standards of property (ensuring that the right of appraisees will be protected), utility (ensuring that personnel evaluation constructively contributed to developing competence and delivering excellent service), feasibility (ensuring that personnel evaluation is conducted in reasonable institutional settings) and accuracy (ensuring that an evaluation has produced dependable information) (Joint Committee on Standards for Educational Evaluation, 1988). Such reasons render it necessary to modify present appraisal systems in Taiwan; they are unplanned, lack support and incorporate insufficient professional dialogue. Moreover, they are insufficiently developmental and insufficiently continuous to become performance management systems capable of combining emphasis on performance and professional development, setting shared objectives with advisers and ensuring ongoing communication, dialogue and cooperation with them during the appraisal year. Such features would be widely regarded as requiring incorporation if principals are to be provided with appropriate feedback and counselling support based on accurate performance data and analysis, such as will help them in setting improved objectives for the next year. Performance appraisal should pay more attention to such processes and developmental needs and is arguably more likely to finally result in better performance and a sense of satisfaction for principals than those currently formulated by Taiwanese local government agencies

1.1.6 Lack of systematic exploration of PPM system in Taiwan

Issues of PPM have rarely been explored. In Western education systems, though recently there have been some related publications which have focused mainly on teacher performance management (Bubb and Hoare, 2001; Dean, 2002; Hartle, Everall and Baker, 2001; Jones, 2001; Middlewood and

Cardno, 2001; Reeves, 2002; Tranter and Percival, 2006; West-Burnham, O'Neill and Bradbury, 2001), following the impetus given by government to performance management policy in schools. In contrast, research on principal performance management remains rare. In Taiwan, most of the theoretical and practical knowledge of performance management has been in business fields. But the organisational structures and nature of schools and industrial and commercial enterprises are different. Its schools are managed by strong bureaucratic local government organisations, to whose line managers, principals are accountable, while within them they share more and more decision making power with teachers, engendering a dual system (Owens, 2001). Although notions of management generated in enterprise still provide inspiration, it can only be apposite to construct PPM system as appropriate to educational environments. In Taiwan while principals should be appraised once per tenure, researches have tend to focus mainly focussed on constructing appraisal systems (J. Z. Cai, 2004; Z. B. Chen, 2005; Cheng, 2002a; D. R. Zhang, 1999; Hou, Zhang, Lin, Zhu, Liu, and Chen, 2000; J. S. Wu, 2001; D. Y. Wu, 2001; D. Y. Wang, 2004; S. J. Wu, 2006), others on appraisal criteria/indicators or methods (M. E. Chen, 2003; M. Y. Chen, 2005; G. B. Guo, 2001; Y. J. Hu, 2002; W. S. Huang, 2002; Y. H. Luo, 2000; Z. R. Wu, 2002; S. Y. Wu, 2003). However, as has been contended, performance appraisal is distinct from performance management in nature, the former focused on predicted objectives and criteria in its collection and analysis of data on appraisees as the basis of judgment in personnel decisions. In contrast, the latter focuses on development that emphasises managers and appraisees as cooperative partners in improving the latter's capabilities and performances. As a management system it is progressively cyclic, moving through planning, counselling and review. Any formulation and introduction of such a system within such a unique culture as the Taiwanese, in replacement

of our present principal evaluation system, requires careful research.

1.2 Research Purposes

In the light of the evidential and policy backgrounds and their significance described above, the main purpose of this study is to establish the possible conditions of formulating and implementing a practicable PPM system for primary and junior high schools in Taiwan. Senior high schools are excluded because compulsory education in Taiwan, managed by local government, extends for only nine years, from primary to Junior high school in which management systems are similar. Senior high schools are managed by central government and have more autonomous decision-making powers and management systems. Their need for PPM might be just as real but prospect of its introduction and the logistics of its investigation would be quite different. It was thought that this study should:

1. clarify the basic concepts of PPM and compare it with principal performance appraisal.
2. explore theoretical analyses of the implications of PPM;
3. examine the experience of PPM devised and implemented in Britain and New Zealand and review the current situation in Taiwan.;
4. construct a preliminary, feasible model and its elements for formulating a PPM system;
5. empirically examine a feasible PPM system and practical means of its introduction in the light of the views of administrators and principals; and
6. synthesise conclusions and recommendations for policy makers and further research.

1.3 Research Questions

More specifically, this study is designed to explore the following research questions:

1. What are the core concepts of PPM? How can we differentiate performance management from performance appraisal?
2. What can be drawn forth as to the conditions and implications formulating the PPM system from philosophical, psychological and administrative perspectives?
3. What experiences are there of PPM system implementation in Britain and New Zealand? And what has happened in Taiwan?
4. What can be gathered as to the feasibility and practicality of PPM systems from literature review?
5. How do administrators' and principals' views of the desirability of, formulation and implementation of PPM shed light on its prospects in Taiwan?
6. What does the study have to say to policy makers and researchers?

1.4 Overview of Methodology and Scope

Following literature review, field work employing methodological triangulation which combined questionnaire survey and interview examined the views of educational administrators and principals of primary and junior high schools on formulating a PPM system in Taiwan. The purpose of the former was to examine perspectives that located and clarified basic PPM system concepts and drew out their theoretical implications from relevant philosophical, psychological, and administrative discourses which, alongside insights from Britain, New Zealand and existing Taiwanese experience, were used in framing the instruments used for empirical research.

The main purpose of the questionnaire survey was to elicit opinions of administrators and principals as to whether and how to formulate a practical PPM system with respect to its three stages of planning, implementing and outcome treatment. The main purpose of interviews, in turn, was to flesh out questionnaire responses by exploring in more depth the opinions of principals drawn from primary and junior high schools and administrators from the Ministry of Education and Bureaus of Education in charge of school affairs in local government.

1.5 Research Framework

The framework of this study in pursuing the purposes and questions outlined is depicted in Figure 1.1 and consists of four parts, conceptual analysis, PPM system analysis, empirical study and conclusions. The main purpose of the conceptual analysis is to provide a foundation of formulating PPM system practice. It consists of three parts, including basic concepts (Chapter Two), theoretical analysis (Chapter Three) and the PPM experience of Britain, New Zealand, and Taiwan (Chapter Four). The analysis PPM systems aims at exploring their structures and rationales by examining what are regarded as feasible models of practice in terms of their planning, implementation, and outcome treatment stages (Chapter Five). Empirical research was devoted to examining what Taiwanese administrators and principals thought about formulating PPM system practice, using mixed method design which combined questionnaire survey and interview (Chapter Six). After data analysis (Chapter Seven), the study concludes by briefly synthesizing and reflecting upon these activities and providing some recommendations for educational policy-makers and researchers (Chapter Eight).

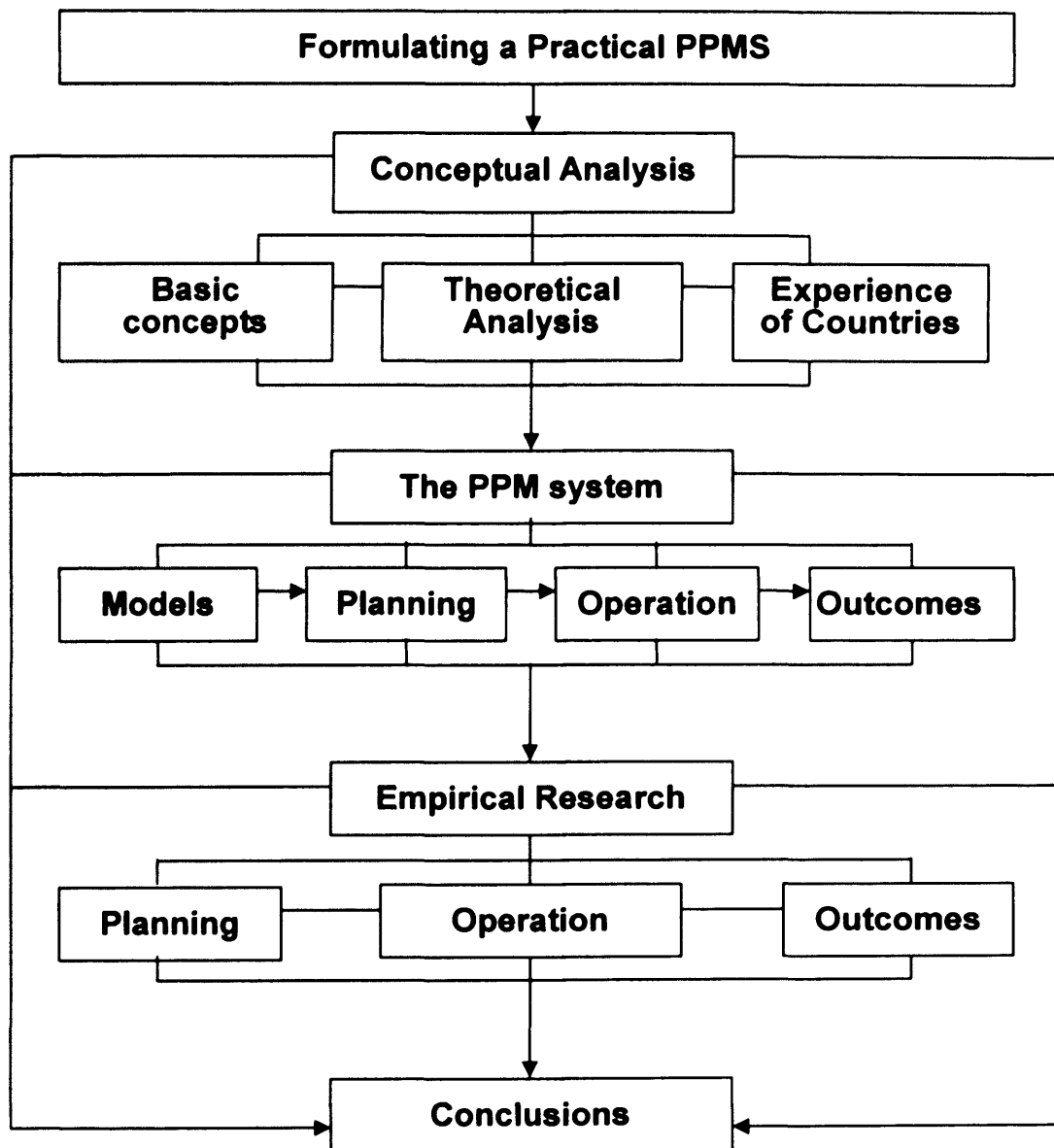


Figure 1.1 Research framework of the study

Chapter Two

A Conceptual Analysis of PPM

2.1 Introduction

This chapter is devoted to what may be regarded as basic concepts of PPM in terms of their delineation in the growing literature in the area. It will seek to draw out the way in which 'management' as a field of knowledge is characterised by the limitations of all social science knowledge, both resting upon paradigms that may be regarded as more or less incommensurate or subject discourses which are horizontally structured, theoretically weak and ideologically embattled. It serves merely as preface to later, theoretical accounts in Chapters Three that appear to have fed into and may even be regarded, in some respects as, 'good science' backing PPM and attempts to review the experience of PPM systems in three countries in Chapter Four. Chapter Five forms a bridge between them, where a possible model for PPM is proposed and its use as a basis for empirical investigation described in Chapter Six and reported in Chapter Seven, which contexts the prospect of its introduction in existing, discontinuous principal appraisal mechanisms in Taiwan. It is acknowledged that the attempt to clarify a sound basis for its development in Taiwan is essentially an exercise in normative professional practice. The hope here that it will be as conceptually, as well as empirically well founded, as possible. There are five sections in this chapter concerning definition and nature of PPM, its purposes and functions, integration of different approaches, relationship and position within school and factors of influencing principal performance.

2.2 Definition and Nature

In understanding the nature of PPM we must first clarify the concepts of 'performance' and 'management'.

2.2.1 Performance

Performance has many diverse and specific meanings in different fields. Relevant individual performance may vary in terms of goals and duties expected in organisations. In industrial and commercial enterprise notions of performance tend to focus mainly on products and benefits. In educational organisations it is likely to be conceived of more in terms of educators' behaviours and non-profit outcomes and referred to in terms, such as effective leadership, teaching behaviours and student attainments. However, what performance processes across organisations can be held to have in common is that they tend to concern the behaviour and outcomes delivered by individuals in relation to prescribed roles or duties, especially in relation to characteristic target achievements. Bates and Holton (1995) indicated that performance is inevitably a multi-dimensional construct, different definitions needing to be measured by different methods. Basically three categories concerning the meanings of performance are recognised in the literature (Bernardin, Kane, Ross, Spina and Johnson, 1995; Campbell, 1990; Campbell, McCloy, Oppler and Sager, 1993) relating to behavioural, outcome and combined dimensions.

2.2.1.1 Behavioural Dimension

Though most of what happens in organisations, according to Etzioni's (1960)

famous dictum, is behaviour that does no other than ensure that they persist as social systems, in conventional management discourse the behavioural dimension of performance tends to refer only to those actions pertaining to objectives that individuals engage in when pursuing organisational targets. Not all behaviours exhibited by individuals within an organisation are related to performance, only those contributing to obtaining its goals. Defining performance, therefore, involves a process of judgment in relation to the goal requirements of organisations. In particular, only those activities which are observable, measurable and quantifiable tend to be deemed performance behaviour (Campbell, McCloy, Oppler, and Sager, 1993). Ilgen and Schneider (1991: 3) indicated that performance is what the person or system does. Mohrman, Resnick-West and Lawler (1989: 48) described performance as consisting of individuals engaging in behaviour in situations so as to achieve results. Campbell et al. (1993: 40) argued that performance was to be seen not so much as the consequence or results of action but as synonymous with behaviour that people actually did and which could be observed. Processually such behaviours are the means of achieving outcomes which count as reaching organisational goals. In the cases of some organisations and positions, such as schools and leaders, outcomes are not easy to judge directly, so that the behaviours which individuals display become the focus of performance. Emphasis is laid very much on the behaviourally overt and existence and character of organisational goals are generally taken to be unproblematic.

2.2.1.2 Outcome Dimension

Outcome dimensions of performance refer to those results delivered by individual actions that correspond to the goals of and contribute to the target

achievement of organisations. The actions or behaviours in which individuals engaged are not recognised as performance, only those final outcomes pertaining to the goals of organizations to which they give rise. For example, principals may strive to formulate and implement their curriculum programmes in the hope of raising the achievement standards of students but indulge in futile effort if their actions or behaviours can not be recognised as performance. On this view it follows that appraising performance should not merely be judged in terms of behaviours but should rely, in the last resort, upon results. Adopting such a perspective, Bernardin et al. (1995: 470) indicated that performance is the record of outcomes produced in terms of a specified job function or activity during a specified time period. Rao (2004: 5) pointed out that the most acceptable and visible, as well as measurable, dimension of performance is the result or output. What we should always remember is that such an emphasis has little to do with what sociologists would regard as 'actually happening' in organizations, in ways that might serve as meat and drink to ethnographers for whom the notions that organisations are 'owned' and 'do' certain things *qua* goal pursuit would be issue rather than given datum. That organisational theory in general has exhibited a succession of competing approaches had been well attested since Mouzelis (1967) and Silverman (1968) and related to educational institutions, in particular since Davies (1973)

2.2.1.3 Combining behaviour and outcome dimensions

It is well acknowledged, however, that merely judging individual performance as behaviours or outcomes is inadequate. The outcomes that individuals strive for are influenced by a variety of factors, some of which are beyond their control. Moreover, it is sometimes difficult to display concrete results directly

for individuals with managerial duties and it would be unfair to appraise their performance simply from outcomes. It is contended, therefore, that the best way to define the meaning of performance, even in formal organisational contexts, is to see it as embracing both behaviour and outcomes. Furthermore, no matter what is to be observed or measured in terms of individual behaviours or outcomes, they should be judged during specified periods of time and situations if accurate and rational appraisal of them is to be achieved. It is important to distinguish whether performance is historic or current; whether it has resulted from individual or team or organisational effort; or whether it is based on individual endeavour or caused by chance stemming from external factors, such as circumstantial change. Defined in such terms, principal performance can be defined as the behaviours or outcomes which they display in relation to targets set and achievement established during particular periods of time, within specific circumstances. Its judgement should be contested with some sensitivity within the more general 'noise' that characterizes all organizational process. It bears repeating that sociologists, such as Etzioni (1960) speculating almost half a century ago as to what fraction of organisational activity might be regarded as 'goal-oriented' rather than 'self-maintaining' tended toward answers in single figures.

2.2.2 Management

Management is a series of activities involving a variety of organisational elements. These include the object to be managed, purpose, organisational objectives, process, method and action. Management by a unit or persons is initiated in organisations which account for its responsibilities. Its purposes tend to be somewhat anticipative with respect of actions likely to achieve objectives. With respect, for example, of school principals, there are specific

objects to be managed, such as personnel, affairs, finance or facilities for whom practical methods must be formulated in the hope of achieving objectives relatively effectively. Reaching objectives may not be achievable in one or even several steps but through a series of dynamic processes and activities, for example, with respect of planning, implementing and controlling (Bedeian, 1989; Cheng, 2004; Pearce and Robinson, 1989; Q. S. Wu, 2004). Moreover, in managing personnel, interaction and setting shared targets, providing continuous support for their achievement tends to be both expected and required in many organisational contexts. In such terms, management can be thought of as a series of processes or behaviours that a specific unit or delegated person with anticipative purposes shows toward specified objects in search for effective methods, within a dynamic process, to accomplish the objectives set within in organisation. Again, who or why such objectives are set tends to remain unproblematic in the traditional management literature, such approaches tending to remain shy of delving into considerations of power and control. At the same time, in personnel management discourse, management processes are increasingly expected to encompass shared commitment on target settings, continuous communication, dialogue and cooperation between managers and subordinates in the hope that the targets may be the more effectively achieved.

2.2.3 Performance management for principals

While there is little research on PPM there is a good deal of output in terms of other approaches to principal appraisal/evaluation in Taiwan. Conceptions of performance management (PM) derived from both educational and business practices can provide useful clarification and understanding of school processes. From a school perspective Q. F. Zheng (2004) defined PM as a

system designed to integrate organisational and individual goals in managing and appraising the conduct and results of departmental processes by means of determinate procedures and methods designed to enhance subordinates' capabilities and raise their level of organisational performance. Western scholars, such as Hartle, Everall and Baker (2001: 3) have indicated that while 'PM' has no standardised definition it implies a process: that links teachers, support staff and their respective roles to the success of pupils and schools; establishes shared understanding of what has to be achieved and how and of managing staff in such a way that it will be achieved; and ensuring that staff are doing right things in the most effective way possible, to the best of their ability. Armstrong (2004: 1), from a business HRM perspective, advocated PM as a strategic and integrated process intended to deliver sustained success in organisations by improving the performance of people who work in them and developing the capabilities of individual contributors and teams. On this view, it is seen as important that PM should lay emphasis on: integration as the axis that can link tasks, behaviours and outcomes across a whole organisation, its teams and individuals, combining functions with HRM; the sharing of processes between managers and individuals; sustained success as its ultimate purpose; performance improvement and developing individual capabilities; and regard for it as a strategic process integral to the operation and function of the whole organisation. Numerous researchers (Armstrong, 2004; Bacal, 1999; Rao, 2004) have indicated that the essence of PM lies in the concepts of cooperation and sharing between managers and subordinates during interaction and communication processes.

Manifestly in order to seek and sustain success, when viewed in this way, organisations should establish a strategic performance management system aimed at integrating its organisational functions. Such a system might set out

not only to underline the need to combine individual and organisational objectives but to give consideration to both reaching performance objectives and promoting individual capabilities. It should also highlight consensus and shared commitment on objectives and processes between individuals and organisations. During its implementation phase it should not only stress effectiveness and efficiency of methods but communicating, cooperating and sharing processes between managers and subordinates. In seeking to optimise organisational objectives, individual performance improvement and professional development such a system should be thought of as a cyclical process pursuing targets limited by period, scope and condition.

Principals are the objects in PPM rather than schools or teams. The administrative management systems within which they work in different countries will be diverse and definitions of PPM would differ in each. In England and Wales, the central government (DfEE 2000a; DfES 2001b) and the Welsh Assembly Government (2002) defined PPM as a system of annual performance review based on shared commitment involving professional dialogue about aims and achievements between head teachers and their governing body in support of continuous improvement of the former's leadership and performance, in the hope of achieving success in raising pupils' standards. In the UK, school management systems are based on participatory (Sturman, 1990) or balanced control models (Leithwood and Menzies, 1998), governing bodies consisting of representatives selected or appointed from parents, the local education authority (LEA), school staff and the community, serving as principals' employers and assuming responsibility for the management of their performance. In Taiwan, Bureaus of Education of local governments are principals' line managers and would provide PPM advisers.

2.2.4 Nature of PPM

Drawing upon the characteristics of PPM drawn from the literature above, we might attempt to construct a model to encompass the nature of PPM which had the following characteristics:

1). objectives orientation: PPM purposefully starts with setting targets to be striven for in ongoing processes of goal achievement, a modality derived from management of objectives (MOB) that combines this emphasis with insistence on consensus in organisations concerning their operation processes;

2). developmental orientation: Development is a dynamic and ongoing process, which implies growth and change (McMahon and Bolam, 1990:4). PPM seeks means of achieving better results through performance improvement combined with development of individuals (Armstrong, 2004), stressing learning and development;

3). interaction orientation: PPM requires regular and frequent professional dialogue and communication between managers and principals characterised by mutual respect and sharing. It differs from mere performance appraisal that has operated top-down and has been inclined to focus on data collection and judgment by appraisers;

4). cooperation orientation: while democratic models of management should be based on cooperation and collegial relationships (Olssen, Codd and O'Neill, 2004), neither top-down monitoring of principals nor leaving them alone is held to effectively facilitate their performance. In contrast, PPM emphasises partnership based on cooperation and shared commitment involving mutual respect, trust, support and consensus in promoting principals' performance achievement;

5). sustained orientation: the ultimate purpose of PPM is to ensure sustained development and quality promotion in schools. In their pursuit, while principals' achievements are important, management processes should not be ignored. School development is viewed as involving endless, ongoing processes in which principals' capabilities are required to keep up with professional expectations;

6). integration orientation: PPM seeks to connect principals' individual objectives with school objectives, combining individual performance and principal professional development, integrating HRM with PPM functions. As Armstrong (2004: 8) indicated 'performance is a force for both vertical and horizontal integration', vertically integrating individual and whole school performance objectives while horizontally bundling PPM strategies with other HRM functions; and

7). systematisation orientation: in a cyclical process which does not merely stop at performance appraisal, PPM sets out to be a management process comprising performance planning, agreement, counselling and feedback, appraisal, and outcome treatment.

In addition, the scope and standards encompassed by PPM are not only related to management purposes but involve performance, time periods and circumstances inside and outside schools. Their nature of PPM may be regarded as multi-purpose, multi-aspect and dynamic, its objectives not single but multiple. Moreover, given that principal performance expectations will differ by culture and time, it will be diverse across regions and countries. At the same time principal performance, as measured by PPM, is expected to be unstable but alterable in the light of accompanying internal or external and subjective or objective factors and should be oriented and reviewed contingently by managers and principals. Some performances may change

permanently, some temporarily (Sonnentag and Frese, 2002). For example, some incompetent principals may be worthy of encouragement, capable of improving their performance or adjusting their position. Some excellent principals may get worse, their skills decreasing, caused changes in their working environment.

2.3 Purpose and Function

Upon introduction PPM might be expected not only to directly impact on principals but indirectly on whole school performance, functioning not only so as to influence personnel decisions via appraisal, but also to provide continual support in helping principals in problem solving that sustains ongoing development, as well as supplying knowledge in general. The purposes of PPM, then, can be conceptualised as existing at two levels, individual and school (Darling-Hammond, Wise and Pease, 1983) and in three substantive approaches of development, accountability, and enlightenment (Chelimsky, 1997), giving six basic categories of aims, as depicted in Table 2.1.

Table 2.1 Purposes of PPM

| Categories | Development | Accountability | Enlightenment |
|-------------|---|--|--|
| Individuals | 1. Assist in solving problems. 2. Guidance to Improve deficiencies. 3. Facilitation of professional development. 4. Help in achieving targets. | 1. Present principals' performance. 2. Serve as a reference for principal praise, reappointed, rewards, and pay. | 1. Create self-reflection consciousness. 2. Facilitate principal self-regulation. 3. Enhance sensibility toward problems. |
| Schools | 1. Integrate individual and school objectives. 2. Construct a cooperative and shared team. 3. Shape a sustained improvement culture. 4. Facilitate whole school improvement. | 1. Present school status. 2. Serve as a reference for selection of model/demonstration schools' rewards and team performance rewards. | 1. Enlighten school self-reflection consciousness. 2. Facilitate school self-management. 3. Enhance sensibility toward problems. |

2.3.1 Developmental/formative purposes

Developmentally, the purposes of PPM can be distinguished at individual and school dimensions. Individually, it sets out to assist principals to solve problems, impossible alone, given their typically heavy workloads and the uncertainty and diversity of the aspirations of relevant, different stakeholders. PPM practice requires principals to be provided with partners with whom they may discuss, clarify and share decisions, guiding them toward remedy of their existing deficiencies. Though they may have undergone many pre-service training and in-service experiences, principals will be capable of improvement. However, while heads or principals may exist in isolation (Hewton and West, 1992, Mercer, 1996), they tend lack mentors and critical friends. Moreover, in bureaucratic systems when superiors discover deficiencies, they may tend to impute blame rather than experience sympathy. A PPM system would aim to alter such a control modality in the direction of offering useful, development-oriented support designed to generate more positive benefits to principals, facilitating their development, as appropriate. School-based management (SBM) has tended to alter principals' roles from being senior managers obeying superiors toward becoming core leaders in schools. We now expect them not only to fulfil policy implementation tasks but also develop schools' vision and goals, engage in strategic planning and share power with teachers, parents and communities. Their roles have extended from managerial to instructional leadership and we refer to the latter as having transformational, moral, participative, strategic and contingent aspects (Leithwood and Duke, 1999) and recognise that in encompassing such change they need to learn by acting out their ideas. To such ends, PPM systems seek to provide diagnostic functions in formulating development

plans derived from cyclical review processes, pushing principals to achieve targets which are easy to set but difficult to fulfil.

At the school level, a developmental focus will be oriented toward integrating individual principal performance and school objectives, constructing a cooperative, sharing principal and manager team within a learning organization that highlights ongoing communication, dialogue and cooperation and shaping a sustained improvement culture. The core ideas of PPM systems are to set appropriate objectives, raise target achievement by ongoing professional development and counselling processes and, through review, appropriately resetting targets to shape a sustained, improvement culture in schools, facilitating whole school development.

2.3.2 Accountability/summative purposes

Accountability processes chiefly concern appraising principals' performance and making personnel decisions concerning their selection, reward, punishment and promotion. It all too easily gives rise to anxiety, pressure and resistance. Even in current HRM systems principals cannot escape appraisal. In PPM systems it is planned to assuage conflict between developmental and accountability purposes mainly by placing relative emphasis on positive reward and motivation rather than negative punishment and threat. Principals, it is argued, can be provided with guidance and feedback necessary to review their deficiencies and effect year-on-year improvement. At the end of each year of tenure, their performance can be appraised for accountability purposes and lead, as appropriate, to praise, reappointment, performance rewards and raising movement along pay spines.

Although the object of PPM is the principal, not the school, performance target setting it will seek to combine them. School status partly relies on principal performance. When principals perform successfully with their colleagues, schools may be selected as model/demonstration sites or receive team performance rewards.

2.3.3 Enlightenment purposes

At the individual level, PPM may have at least three enlightenment purposes. In the first instance, it should enhance principals' self-awareness. No one likes to be appraised unless it proves beneficial. Supporting principals tends to make them more open to striving for target achievement. Secondly, it ought to facilitate knowledge and capacity to self-regulate. Management by outside monitoring is not a sustainable basis for facilitating subordinates' ongoing performance improvement. Only arousal of self-awareness and willingness to self-regulate actively promises this. Understanding their performance problems ought to be principals' main focus, presupposing awareness of those factors that may influence them. At a collective level PPM can also raise school self-awareness across departments and persons by analogous means.

2.3.4 Functions

In summary, the functions of PPM can be regarded as to:

- 1) systematically facilitate principal performance through a planned interaction and management process shared by principals and their advisers;
- 2) assist principals in solving problems and overcome their personal

shortcomings, particularly given that they work in a changing era and with a variety of role expectations and increased duties, unavoidably facing more complicated problems than hitherto. Currently they receive scant support and feedback, leaving them short on motivation and power to improve;

3) positively enhance principal professional development in roles that involve high complexity and flexibility in the face of increased change in educational policies and circumstance. Effective professional development must understand their growth needs first;

4) raise teacher morale and student achievement; though teachers are the most crucial persons in influencing student learning, principals play key roles in directly affecting teacher performance and attitudes (Duck and Stiggins, 1985; Ginsberg and Thompson, 1992; Glasman, 1992; Hallinger and Murphy, 1985; Snyder and Ebmei, 1992; Stufflebeam and Nevo, 1993). Going through a PPM system will help principals in setting adequate performance objectives and displaying appropriate leadership likely to motivate teachers toward raising student achievement standards;

5) provide guidance for setting school improvement plans with appropriate reference to both principals' and schools' problems;

6) effectively promote school management quality, assuming that principals are key leaders of effective schools (Anderson, 1991; Ginsberg and Thompson, 1992) to be systematically managed and evaluated (Stufflebeam and Nevo, 1993) and weak ones improved; and

7) understand the outcomes and problems of policies, uncovering obstacles to policy achievement and appropriately revising implementation strategies.

2.4 Integration of Different Purposes

Within constructions of PPM, different functional representations of purposes, particularly as represented by developmental and accountability approaches, may show signs of conceptual and ideological incommensurability. Even in contexts where there may be perfectly honest intention to lay emphasis on improvement or to integrate both into organisations' processes (Middlewood, 2002; Middlewood and Cardno, 2001,), there are implicit difficulties about them coexisting in one management system simultaneously. Moreover, it is palpable that many of the claims made about the importance and effectiveness of one approach or another are statements of commitment or belief, normative or persuasive rather than empirically attested in nature. While most social science literature, inevitably weakly theorised and 'horizontal' in knowledge structure (Bernstein, 1999) has the tendency to 'sell itself', much of management and organisational 'theorising' is market-positioned to make findings and recommendations appear inevitable.

The local issue of coexistence between developmental and accountability purposes in appraisal have, indeed, been discussed by a number of scholars. Some of them, such as Dill (1995), Popham (1988), Prebble and Stewart (1983) and Woodhouse (1995), have pointed out that they cannot coexist while others, for example Massy (1995), Vroeijenstijn (1995) and Su (1997) contend that they can. The main reason that tends to be given in the literature as to why they cannot coexist is that accountability outcomes tend to be punitive, inflicting threat and anxiety upon appraisees who, thereby, understandably, seek to hide their deficiencies and become unwilling to be appraised with the degree of frankness required for improvement purposes. Unless quality assurance is taken to be a joint responsibility and no one feels

threatened by ongoing efforts, conflict and avoidance will ensue. Sue (1997) claimed that an emphasis on mutual trust, without threat, where appraisees are active, autonomous, responsible and willing to sincerely address raising quality is prerequisite to adopting self or peer evaluation effectively. We might note that it is not simply contingent variations in style and emphasis that are at stake here. The models of people, motivation, interaction and their valuation that underscore the impulses to 'control', 'appraise' and 'develop' arise from different metaphors or paradigms of social behaviour and unless their differences are recognised and somehow reconciled their attempted combination remains incoherent or is merely stipulated.

In practical terms, developmental approaches tend to see performance results as the start of the next cycle, while accountability approaches tend to see them as the end of cycles and irrelevant to the next one. When PPM system attitudes and practices are developmental, principals, hopefully, face comfortable and composed managers willing to take initiatives in helping them to remedy weaknesses revealed by self reflective review processes. When principals encounter an accountability-oriented PPM system they will tend to become self-defensive, displaying their strong points but hiding deficiencies. Putting both, unrefined and unreconciled, into one PPM system will tend to guarantee accountability overwhelming developmental purposes; the wherewithal for improvement will tend not to emerge to provide objective and accurate practical information as reference for 'next' cycles. However, in practical terms, if we separated them, it would be confrontational and impracticable to establish two different systems treating the same people in one organisation simultaneously. What, then, might we do? Can they be integrated?

2.5 Relationship and Position

2.5.1 The relationship between PPM and PPA

PPM and principal performance appraisal (PPA) have sometimes been mixed, despite their difference in nature. While the former emphasises shared commitment toward target setting, methods of their achievement, cooperation between principals and their partners, sustained communication and dialogue, both upward and downward, adoption of effective appraisal and management methods and enhancement objectives achievement and improvement, as well as professional development; in a systematic management process, PPA connotes 'the formal assessment and rating of individuals by their managers usually at an annual review meeting [...] operated as a top-down and largely bureaucratic system. It was often backward-looking, concentrating on what had gone wrong rather than looking forward to further development needs' (Armstrong, 2004: 10-11). Schuler (1995: 306) indicated that performance appraisal is a formally structured system that measures, judges and affects employees' characteristics, behaviours and results pertaining to work in order to find out their current and potential performance, so as both to benefit them and the organisation. Performance management is broader than appraisal. Table 2.2 attempts to set out their differences in terms of eleven elements: position, relationship, core purpose, objective, criteria, focus, link, concept, interaction, time and manager (Armstrong, 2004; Piggot-Irvine, 2003; Roe, 2004; Schuler, 1995; Williams, 1998).

Table 2.2 Compare the differential between PPM and PPA

| Item | The PPM | The PPA |
|--------------|--|--|
| Position | Core of school management | One of processes in PPM |
| Relationship | The guideline of PPA | One of techniques in PPM |
| Core purpose | Integrated developmental and accountability purpose | Accountability or developmental purposes |
| Objectives | Combined performance and professional development; Development needs are identified at the start of the year | Focused on performance; Development needs are identified at the end of the year. |
| Criteria | Individualised; Flexibility; Consensus criteria | Standardised; Fixed; Predetermined criteria |
| Focus | Process and outcomes | Inclined to outcomes |
| Link | Link individual, team and school | Inclined to individual |
| Concept | Share commitment; Cooperation; Equal relationship; Forward-looking | Top-down review; Monitor; Unequal relationship; Backward-looking |
| Interaction | Ongoing communication | Limited communication |
| Time | Whole period (cycles) | At the final term (one time) |
| Manager | Line manager | HRM department |

Piggot-Irvine (2003) indicated that performance management is a macro-descriptor which contains all the micro-processual elements of HRM, embracing all functions from when individuals enter organisations to when they leave. For example, the New Zealand government in their policy guidelines of Performance Management Systems (PMS-1) prescribed that effective performance management systems should encompass many personnel management policies, including recruitment, retention, selection, appointment, employment contracts, registration, appraisal, career development, professional development, succession planning, remuneration management, discipline and dismissal (Minister of Education, 1997), giving it a crucial position in enhancing or hindering individuals' performance in schools.

2.5.2 The position of PM in school management system (SMS)

In order to more explicitly understand the function of PM, we should clarify its intended position in school management and HRM systems. As organisations are goal-orientated individual performance objectives tend to be set in accordance with them. In facilitating schools' performance, PM may become their core, used to plan and review the rationality of their structures and integrate HRM functions, as represented in Figure 2.1. Instrumentally, all organisations, as in the case of schools, can be thought of as existing to fulfil their objectives, in whose pursuit they set up 'organisational structures' around 'human resources' to secure their basic operational tasks and programmes to ensure achievement of their performance objectives. Performance management would seek to effectively integrate and facilitate their functions.

2.5.2.1 PM and organisational structure

Organisational structure refers to the operational framework organised in accordance with a rationale for the division of labour to plan and deploy personnel and tasks reasonably so as to achieve objectives. Models of organisational management structures start from design ideals, what are regarded as sound ones depending on a division of labour and job analysis thought to be appropriate to meeting organisational objectives. However well they serve in reaching objectives, it is argued that they should be reviewed by performance management systems. In other words, it is claimed that PM processes may be used to explicitly control tasks and duties for each job position, review effectiveness of deployment and operation and check the rationality of organisational design; it is in this sense that it is claimed to be the core of organisational structure management.

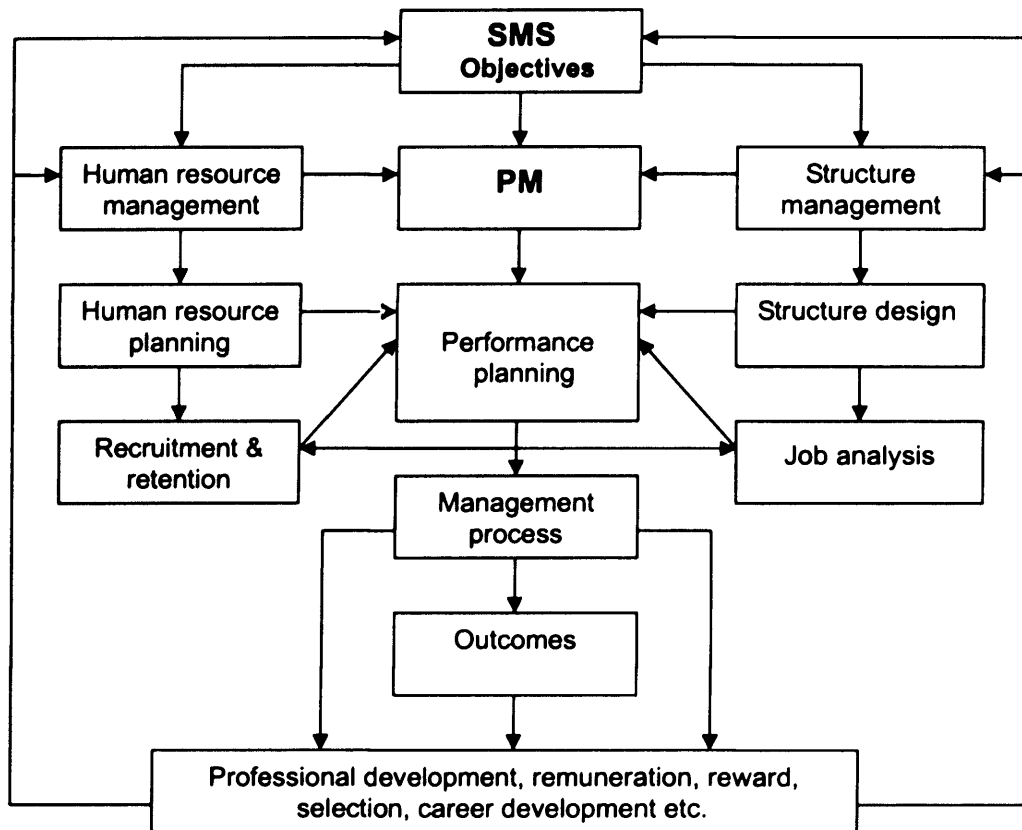


Figure 2.1 Position of PM in SMS

2.5.2.2 PM and human resource management

Human resource management (HRM) refers to organisations managing their manpower by planning, recruitment, selection, appointment, retention, appraisal, remuneration, training/development, transfer, dismissal and other cognate activities to achieve their goals (Castetter, 1996; Dessler, 2000; Schuler, 1995; Seyfarth, 2004). While achieving organisational performance targets is a core organisational task, performance management should play a vital role in HRM processes and cannot be separated from its other aspects (Middlewood, 2002). Figure 2.2 presents a schematic version of this relationship, underlining the claim that high quality manpower assures

organisational effectiveness. Sound human resource management needs clear and accurate performance information to facilitate decisions, such as: whether organisations need to increase or decrease manpower. It validates decisions on recruitment, selection and appointment; revealing and informing the necessity of counselling and supporting employees so as to enhance performance. This, in turn, facilitates implementation of appraisal so as to provide organisations with the sort of validated judgments that lead to contextually rational actions. Within human resource development PM can assist organisations' understanding of employees' development needs in the course of formulating professional development plans. Concomitantly, with respect of human resource remuneration, PPM can provide requisite information on the appropriateness and functionality of current pay or reward systems, as well as providing appropriate information on employee promotion, transfer and dismissal.

Human resource management

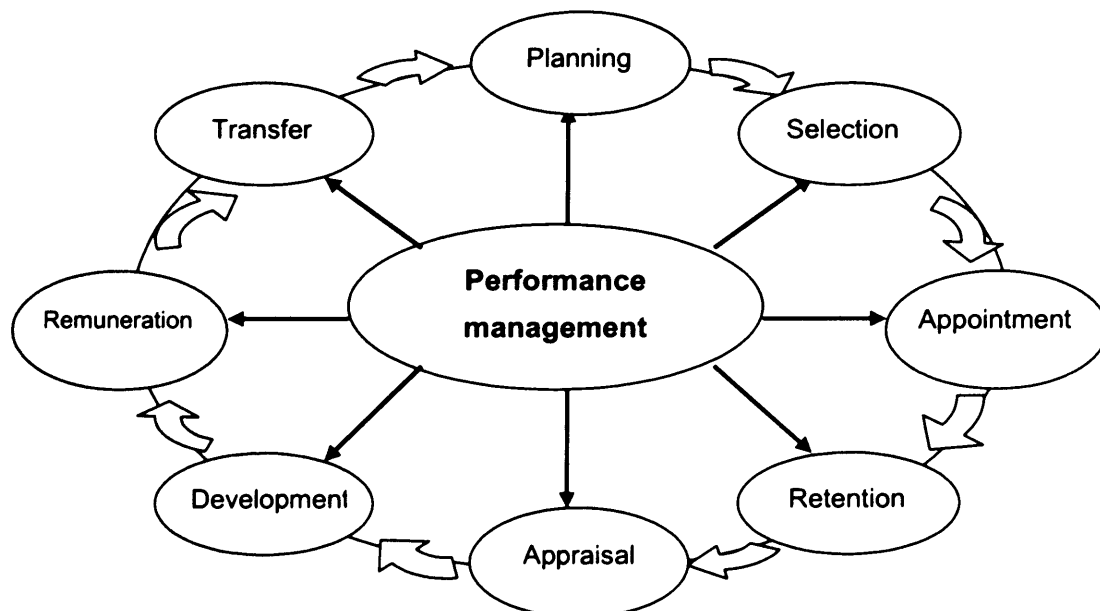


Figure 2.2 Position of PM in HRM

2.6 Factors Influencing Principal Performance

The factors that may affect principal performance are manifold and complicated but their exploration is crucial if we are to understand the possible, main determinants of their behaviour and to formulate a practical principal performance system. Overall, the chief influences upon principal performance can be classified according to source as individual, school internal and external factors. These, briefly listed in Figure 2.3, exist in complex interaction.

2.6.1 Individual factors

Among the many individual factors that influence principal performance, the most crucial factors in terms of the literature include personality, abilities, work values, attitudes, motivation and experience (Campbell, 1990; Kanfer and Kantrowitz, 2002; Sonnentag and Frese, 2002; West-Burnham, 2001). Personality refers to constancy of feeling, thought and behaviour (Zhang, 1989). Everyone possesses distinctive personality characteristics which are different from others that may be used to account for individual behaviours and attitudes in organisations, as well as their professional choice, work satisfaction, stress, leadership and performance (George and Jones, 2004). Similarly, principals' personalities may reflect work motivation, attitudes, behaviours, and performance.

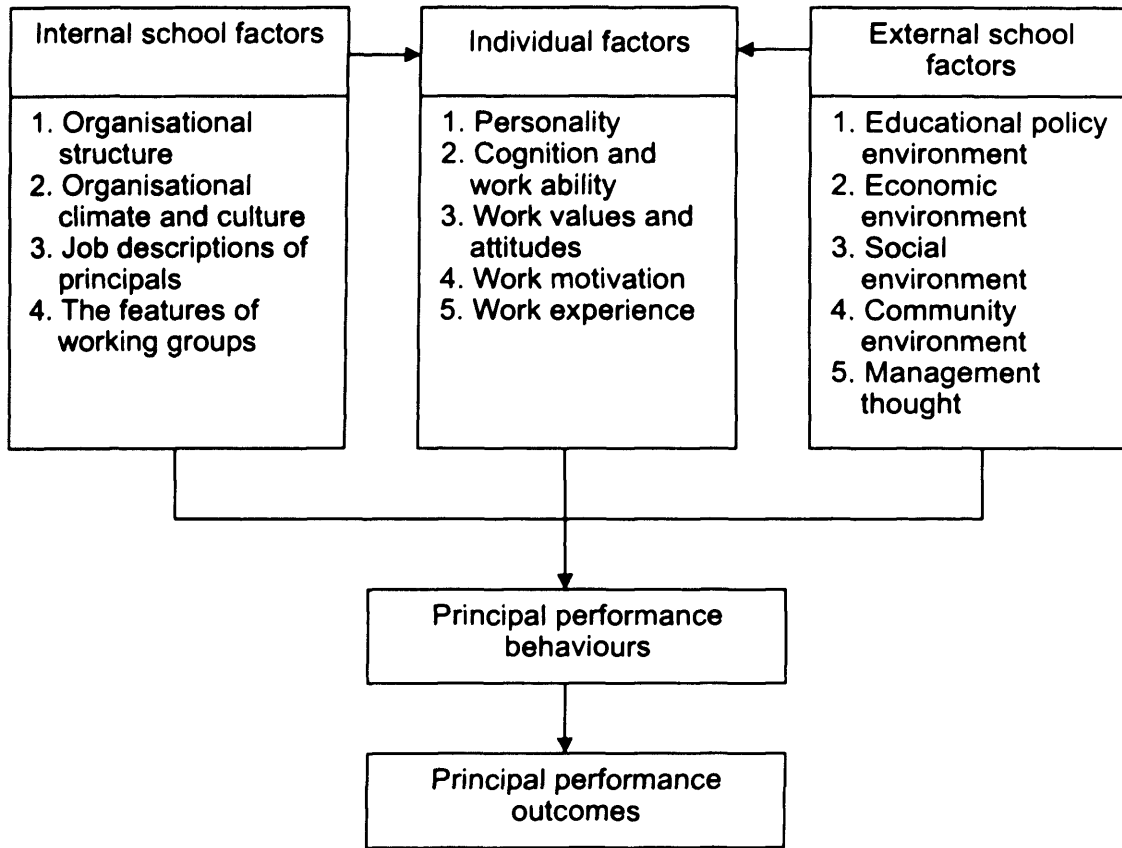


Figure 2.3 Factors influencing principal performance

Besides personality, cognitive abilities and work capabilities may differ among individuals. Sonnentag and Frese (2002:10) indicated that meta-analytic evidence has displayed a strong relationship between cognitive ability and job performance, individuals with high cognitive abilities performing better than those with low cognitive abilities. Principals are expected to possess diverse cognitive abilities which they will reveal as different work capabilities in producing different behaviour and outcomes. Cognition is usually represented as intelligence and, in terms of recent educational fashion, regarded as being definable and categorised in plural terms, such as general intelligence,

multi-intelligence, or even emotional intelligence. While it is now widely agreed to be multi-aspected, intelligence still tends to be viewed as the upshot of congenital and acquired influences.

Work values concern what people expect to get from their work and what behaviours they believe should be performed (Nord, Brief, Atieh and Doherty, 1988). Some will value what they can get from work itself; some highlight what desires its outcomes can satisfy. The former exemplifies intrinsic work values, the latter extrinsic. The literature generally pictures different work values as giving rise to distinct work attitudes and behaviours, the former referring to the feelings and opinions which people tend to hold towards their workloads. Work attitudes tend to be regarded as unstable, just as work values are easily subject to influence by exterior factors, in addition to work performance (Robbins, 2000). Principals holding different work values and attitudes will be expected to reveal diverse feelings concerning satisfaction, work involvement, and performance.

Work motivation tends to be conceived of as the will or intention that leads individuals to be devoted or not to their work or pursuit of organisational goals. It is seen as determining the direction, effort and persistence of individual working behaviour (George and Jones, 2004), affecting the extent of work involvement and observable performance. Although work motivation can not completely determine performance outcomes, highly motivated workers will display better performance than lower, other things being equal.

Work experience refers to the cumulative knowledge, skills, and competence that individuals have amassed from previous work. Because individual performance tends to be affected by previous knowledge and competence,

experience gained by principals, as with others, from their jobs will tend to influence current performances and outcomes.

2.6.2 Internal school factors

School is the main work milieu for principals where they may be able to control some factors which influence their performance, others not. Some tend to directly affect their work, others their consciousness and, indirectly, their performance. Viewed as school organisational behaviours, they can be argued to encompass structure, climate and culture, principals' job description, and their work team.

School organisation structure refers to its framework *qua* division of labour, task assignment and power deployment (Cheng, 2004b). Organisations like schools will be divided into a variety of departments by purposes or functions. Each will require clarification of its tasks and expected standards for each department or position, be assigned power and resources and located within a directive system. Diverse organisational structures frame different organisation styles and operational process that generate distinct forms of (in)effectiveness. School organisational structures and the position of principals within them are set up in Taiwan by law with little differentiation between schools at the same level but with variations between levels so that, for example, elementary and junior high schools are required to conform to different standards. The power that principals have and the degree and direction in which they use it will still, however, tends to differ from school to school even within the same level and principal performance and school organisational effectiveness will vary.

Organisational culture can be conceived of as a set of values, norms, belief systems and practices which members will be constrained to fit in with and be judged in terms of. Organizational culture can affect organization performance (Williams, 1998). Organisational climate is a perceived characteristic within an organization. The work attitudes and behaviours of members will be affected by organisational climate (Cheng, 2004). Negative climates tend to be characterized as closed, apathetic, pessimistic, autocratic, deprived, suppressed, oppositional, and conflicted, while positive climates are regarded as open, passionate, optimistic, democratic, striving, developed, harmonious, and cooperative (Xie, 2004), positively influencing organisational effectiveness (Wu, 1992). Principals working in positive school climates or cultures might be expected to produce more effective behaviours.

Principals' job descriptions are written so as to embody the objectives or contents that they are expected to achieve and implement in their schools so that their content is inevitably linked to performance. Job characteristics tend to influence individual, intrinsic motivation arising from the character or requirements of skill variation, task integrity, importance, autonomy, or feedback. Overt workload and goal achievement difficulties will lead to work stress and engender perfunctory work behaviours. Hackman and Oldham (1980) indicated that work itself involving high skill variation, task integrity and importance tended to lead to meaningfulness for employees, increasing likelihood that they will feel their jobs to be very important, valuable, and meaningful, possessing autonomy that led to responsibility for work outcomes. Providing feedback on work processes tended to lead to beneficial knowledge of results for employees and their part in them. Moreover, jobs entailing moderate workloads and specific and challenging objectives accepted by employees tended to enhance work motivation (Locke and Latham, 1990;

Tubbs, 1986).

Work teams refer to the groups that principals set up in order to pursue agreed goals, whether formally or informally appointed or naturally arising. Cohesiveness which is a sense of togetherness within a group regarded as influencing its quality (Cunningham and Gresso, 1993). Different work teams in schools may have diverse cohesiveness and goals, performing with different effectiveness. Work teams of schools can fall into one of four types along the two axes of group cohesion and goal consistency (see Figure 2.4). High coherence and high consistency groups will tend to have highest effectiveness, high cohesion but low consistency ones leading to high destruction, low cohesion but high consistency ones tending to be selfish and competitive, while low cohesion and consistency groups will tend to be like loose sand, emerging with the lowest effectiveness. The characteristic of such work teams can certainly affect principals' leadership and performance.

| | | | |
|-------------------|------|--|---|
| group cohesion | high | High cohesion Low consistency (destruction type) | High cohesion High consistency (effectiveness type) |
| | low | Low cohesion Low consistency (Loose sand type) | Low cohesion High consistency (selfish type) |
| | | low | high |
| | | goal consistency | |

Figure 2.4 A typology of work teams

2.6.3 External school factors

External factors that tend to influence principal performance stem mainly from changes in their outside environments and may include policy, economic, social, and community conditions and changes in management thought that they may engender. Educational policy refers to the requirements and guidelines set forth by governments seeking to 'solve' education problems or promote educational quality by setting out the norms or standards to be achieved putatively by educational institutions. Educational policies, such as those for principal selection potentially influence all educational stakeholders upon whom they impinge. The economic environment directly relevant to public schooling is conditioned by economic development and fiscal conditions of any system, in turn constraining public finance and annual budgets, and the likelihood of their sufficiency in meeting policy objectives. A Chinese proverb claimed that 'money can not do everything, but where there is shortage of money everything can not be done.' For principals, schools are dependent upon annual government subventions. Poor economic environments affect the content and viability of school development plans and their implementation in resource terms, including principal practical performance. Social environments are conditioned by varied life styles, norms and values that yield distinct role expectations and behaviour models in terms of what is regarded as appropriate policy and practice. For instance, when social expectations are focused on raising educational quality or marked by dissatisfaction with the performance of educators, governments will tend, or even be expected, to intervene more intensively in schools, having formulated appropriate policies toward improvement. Such activity and their relation to popular educational values and expectations of schools will certainly affect the work, motivation and attitudes of principals, conditioning their responses

as well as performances. The majority of school students come from local communities where their schools are located. Community culture and educational values will tend to be directly reflected in their expectations of education quality and educators' performance. Moreover, local economic, cultural resource and educational participative conditions will also tend to influence the extent to which community involvement in school and principal performance is requested.

Management thought refers to those ideas, conceptions and philosophical perspectives that impinge upon management in organisations. Management theories tend to be developed, as with PPM systems, in relation to different eras or environments. Different social backgrounds provide the seed beds within which influential or dominant management theories grow, some becoming major 'management paradigms'. For instance, in recent decades the UK, America, New Zealand and Australia governments under pressure of matching high and rising expectations in the provision of public services with recurrent crisis in public finance and its imputed electoral consequences, have been much influenced by New Public Management thought and market metaphors which have given impetus to ensembles of policy change (Olssen, Codd and O'Neill, 2004), among which accountability policies for public services, including schools, have figured prominently. The government in Taiwan has also been affected by such influences with clear reverberations upon leadership, management style and performance required of its school principals. Principal performance, then, is affected by many complicated and interacting factors. If we want them to perform well, we have to ensure they are involved in an appropriately supportive system that does more than merely hold them accountable for their actions.

2.7 Summary

In this chapter we have tried to clarify some basic concepts pertaining to PPM in the hope of revealing the core perspectives that have informed systems dedicated to its pursuit. They bring concepts of performance and management into rather uneasy, somewhat incommensurate relationship in pursuit of rather different purposes. In examining the relationships alluded to in the literature between PPM and PPA in school HRM systems we find primacy accorded to core management role of PPM. A broad view of factors influential on principal performance locates myriad relevant circumstances that operate directly or indirectly at individual, internal and external school levels. We now turn to more detailed scrutiny of theoretical perspectives in Chapter Three and practical experience in different countries, selectively reported in Chapter Four.

Chapter Three

Theoretical Analysis of PPM

3.1 Introduction

A theory is generally understood to be a set of interrelated propositions that enable people to explain, predict or control events. Hoy and Miskel (2001) indicated that theory can be described as a set of interrelated concepts, assumptions, and generalisations by which the regularities in behaviours in organisations can be systematically described and explained. Theory implicitly involves a functional or practical purpose that can assist people to understand, think about and make decisions, as well as stimulating and guiding further development of knowledge. If we examined relationships between theory and practice, theory, broadly defined, would reveal at least three functions, forming a frame of reference for practitioners, providing a general mode of analysis of practical events and guiding practitioners in making decisions (Hoy and Miskel, 2001). Easy and direct application of theory in solving practical problems is chimerical especially when candidates are scanty. Principal performance management is such a case, short on theories that might guide practitioners toward sound practice. In an attempt to understand why this is the case it is proposed to analyse possible philosophical, psychological and management theoretical contenders in the hope of eliciting their implications with respect to formulating the PPM practice. While theory may not be directly utilised in solving practical problems, Hoy and Miskel (2001) exhorted the usefulness of 'intermediary inventive mind' in the process of transforming it into practice, that is to say, catching theoretical core ideas and using their originality and creativity to make relevant

applications in designing a PPM system.

The development of social science theories has been influenced by different philosophical paradigms, so that we may assume that grasping their diversity may assist in clarifying appropriate conceptions and presuppositions concerning PPM system that embraces the individual, internal and external environments of schools. At the very least these involve psychology and administrative science, the latter, in turn, drawing on sociology and economics. No matter how we approach them, we will inevitably encounter conflicts of concepts or perspectives between different theories or paradigms, though we may plausibly assume that every social science theory or paradigm may provide useful insights upon different aspects of social phenomenon. In this chapter we do not want to become involved in the competition or battle between theories or paradigms but, rather, to try to grasp their core concepts or perspectives and draw out some useful implications for constructing viable PPM systems.

3.2 Philosophical Analysis

Philosophy deals with questions of ultimate reality and the fundamental principles of the universe and life, as well as of human values and regulation of behaviour. Different philosophical schools have different perspectives on ontology, epistemology, methodology and axiology and offer different philosophical hypotheses and explanations on reality. Worthen, Sanders and Fitzpatrick (1997) indicated that individuals' inclination toward and preferences for philosophical views directly influence their judgments. PPM involves judgements in carrying out performance appraisal and will be, either tacitly or explicitly, influenced by philosophical preferences at the level of

basic concepts concerning, for example, setting objectives, and choice of contents, standards and so forth.

Paradigms are sets of interrelated hypotheses which provide philosophical and conceptual frameworks for discussing society and the world (Kuhn, 1970). They entail thought patterns, world views, basic concepts, methodologies and beliefs commonly held by groups of scientists and which constitute the theoretical fabric observed by a scientific community in solving problems. In Guba and Lincoln's (1994) definitional shorthand they constitute worldviews or belief systems that guide researchers. The picture of the social science paradigmatic universe conventionally presented to newcomers tends to be fourfold; there is positivism, naturalism or interpretivism, critical theory and post-structuralism or post-modernism. While their concerns are ontological, epistemological, methodological and axiological, as well as aesthetic (X. Z. Ye, 1985), we will mainly focus our discussion on the first three in relation to different philosophical paradigms, defined thus conventionally and their possible implications for constructing PPM systems.

Ontology refers to questions of existence or being, typically posing questions, such as '(W)hat is the form and nature of reality and, therefore, what is there that can be known about it?' (Guba and Lincoln, 1994: 108) Traditionally, answers have been divided into two schools of thought, realism and relativism or idealism. Realists posit that there is an objective reality independent of sense and experience. Human beings can rely on objective methods to grasp the reality in the outside world; relativists claim that, although there is an objective world, reality is not independent of human thought; only through it and 'the will' can an objective world be endowed with a real existence. Human mind is the authentic reality and can be regarded as self-evident.

Epistemology mainly concerns questions of the nature, source and limitations of knowledge, typically asking '(W)hat is the nature of the relationship between the knower and what can be known?' (Guba and Lincoln, *ibid.*). Like ontology, epistemology can be divided into objectivist, subjectivist or as combination of both. Objectivists, basing belief on the supposition of realism, think that the subject of knowing inheres in the object of be known in the outside world, truth is deemed the actual existence of objects, whose grasp necessitates adoption of value-free, objective methods. On the other hand, subjectivists, being idealists, combine the subject of knowing with the object to be known in the reality of mind; truth exists in the rational consciousness of the subject, knowledge is interpreted subjectively and value-free methods of understanding are neither desirable, nor necessary nor possible.

Methodology focuses its questions of how human beings find out about and understand their outside world, typically asking '(H)ow can the inquirer go about finding out whatever he or she believes can be known?' (Guba and Lincoln, *ibid.*) and subtending to either quantitative, qualitative or combined modalities (G. G. Huang, 2001; Guba and Lincoln, 1989). Each of these aspects of what are represented here as the four paradigms has been explicated in the social science literature at great length (Burrell and Morgan, 1979; Guba and Lincoln, 1989; R. Q. Huang, 1986; G. G. Huang, 2001; Z. X. Huang, 2002; M. Q. Qin, 1998; Qin and Huang, 2002; F. F. Zhang, 2002).

3.2.1 Positivist paradigms

Until the last half century positivists dominated research directions in the social sciences. Truth could be regarded as inhering in a group of statements

isomorphic to entities which could be predicted and controlled through empirical research, entailing a dualist, objectivist epistemology (Guba and Lincoln, 1989). In such a view, researchers are pictured as standing outside phenomena, keeping their objective distance, avoiding value intervention and vested interests, producing results both objective and value-free. In Guba and Lincoln's (1989) terms, the methodology of positivism is interventionist and subjectivity avoiding. As with natural sciences, hypothetic-deductive principles, the search for general rules to describe, explain, predict and control truth, are to be preferred in such a model of the social sciences.

Social science research pursued within a positivistic paradigm claims to work within an objective epistemology and tends to rely upon quantitative methodology, seeing itself as the inheritor of experimental modes and quantitative statistical analyses of the natural sciences. Standardisation, accuracy, reliability and the objectivity of scientific measurement are stressed and emphasis laid on the replicability, verifiability and generalizability of measures and findings (Qin and Huang, 2002; F. F. Zhang, 2002). Data collection and analysis techniques are adopted such that others, using the same methods, can repeat experiments and test generalisations. When undertaking research processes positivists stress operational definition of variables, representative sampling and reliability and accuracy of research tools, striving to keep subject and object separated during research processes in the interests of value-freedom. The quality of inference and explanation rests upon the evidential basis of data.

3.2.2 Naturalistic paradigms

Particularly from the 1960s a number of scholars in the social sciences

expressed increasingly well-articulated doubts as to the virtues or even the appropriateness or possibility of positivism. Some criticised it for neglect of the position and value of the subject and context, wishing to attach greater importance to both. Such a philosophical position has, *inter alia* been variously referred to as naturalistic (Lincoln and Guba, 1985), constructivist (Guba and Lincoln, 1989), interpretive (Burrell and Morgan, 1979) and subjectivist (Greenfield and Robbins, 1993). All privilege the subjective in social life, interaction and understanding and may be referred to collectively as naturalistic or constructivist paradigms. Ontologically they are idealist or relativist, regarding reality not as independent and objective but subjectively constructed by human beings, not fixed but dynamic, truth being relative. Social reality is also constructed through bestowal of meaning in the course of human interaction. Different views are held by diverse groups, at different times and in differing contexts; the social realities which we construct are plural, not restricted by natural principles and cause-and-effect relations. Neither they nor knowledge are constructed other than by individuals in process of social interaction. Relations of cause-and-effect and truth are also socially constructed by human beings, even the most intractable and most delicate of them relying on capable people (not necessarily those with the greatest power) reaching consensus. Epistemologically, naturalistic approaches are monistic and subjectivist (Guba and Lincoln, 1989), investigators and investigated linked in interactive processes of establishing truth. Researchers cannot either be detached from the objects being investigated or their own values though they must remain aware of them. Naturalistic methodology is hermeneutic and researchers are inclined to give stakeholders opportunities to evaluate their ideas or construct new ones. 'Truth' requires processes of constant repetition, re-analysis, and re-evaluation of cases and problems using essentially qualitative means;

knowledge is endogenetic rather than extrinsic, knowledge formation relying on experience rather than scientific method. The accuracy of research relies on the abilities, qualities, backgrounds and acuity of researchers. Its processes, existing essentially within them, can hardly be replicated by others while truth is theory-laden but not value-free. Social science knowledge is derived from uncontrollably changing contexts constructed by social interaction and the focus of its research will be on understanding of social processes rather than 'results'. Researchers are the main sources of data collection and analysis, emphasis laid on description which is rich, deep of 'thick'. Multiple data collection methods are best adopted, particularly observation and interview, inductively extracting details from information collected.

3.2.3 Critical paradigms

Critical approaches within social theory began to draw general attention from the 1970s, like naturalistic approaches, attacking positivism's overemphasis on scientism and objectivism. Their emphasis lies in seeking to deconstruct social reality by demonstrating how modern organisations serve dominant economic and political interests and legitimatise their power through the creation of belief systems that stress the need for order, authority, and discipline (Burrell and Morgan, 1979). Such critiques tend to highlight the importance of subjects constructing their own lives. Critical theorists pay more attention to examining power and ideological control hidden in human society which, it might be claimed, have been neglected, anatomising structures which intentionally or unintentionally distort or control, arguing for restoration of individuals' subjectivity and responsibility through enlightenment, emancipation and practice. Their representative twentieth century

philosophers have included Horkheimer, Adorno, Marcuse, and Habermas (Anderson, 1990; Foster, 1986).

Critical theory can be dated back to dialectics of Hegel, ontologically belonging to historical realism and seeing the reality of the long history of human societies as having been moulded by societal, political, cultural, and economic values that have created and fed upon the crucial, invidious categories of class, race and gender (G. G. Huang, 2001). Adopting negative dialectics to grasp objective reality, it simultaneously indicates that it exists in the world and confirms that it is constructed by human beings. The essence of things or reality does not exist in the real world but exists in the constant denial and dialectics of the real world. Hegel described reality as the process of realisation rather than the actual state of things so we can only grasp the essence of things or reality through constantly negating it, revealing its potential possibility and realisation (R. Q. Huang, 1986).

As to the epistemology of critical theory, Habermas (1971) argued that cognitive interests lead us to do research, deciding our orientation to others in the world and to scholastic research, constituting the preconditions of knowledge. Habermas indicated that three basic elements exist in human life, including work, interaction and power. In the field of work, controlling our environment arouses technical interests so as to produce instrumental knowledge whose laws of cause and effect have to be acquired through empirical-analytical science. In the social interaction field, practical interests are aroused to produce communicative knowledge in order to promote mutual understanding, coordinate social activities and meet the requirements of human beings. Communicative knowledge relies on historical-hermeneutical science and inter-subjective understanding. In the field of power, in order to

secure free and independent development from inexorable social regulation, beliefs and values, emancipatory interests are aroused to produce emancipatory knowledge, which relies on critically oriented science. Critical analysis of power and ideology that influence the communication structure of human society would claim to have unmasked a kind of systematically distorted communication, requiring enlightenment (the disclosure of real interests) and emancipation (striving for the power of self-domination and acquiring freedom) to enable us to cope with unequal, dominant power relations and ideology. Through constant self-reflection and criticism, human beings can acquire freedom and self-determination in changing the social status quo. The methodology of critical theory approaches are self-reflective, seeking to disclose unreasonable cognitive structures and beliefs through constant self-reflection and criticism, repeated argument and sharing of truth, in search of liberation from the many unreasonable powers or ideologies in society through acquisition of enlightening, practical knowledge.

3.2.4 Post-structuralism/post-modernism

Post-structuralism has flourished at least since the 1980s, consisting mainly of philosophical reflection upon and response to structuralism in linguistics, psychology and social sciences (Gutting, 1998: 597), while post-modernism is the successor of modernism, rather than anti-modernism (Turner, 1990), seeking to surpass and reflect upon modernist thoughts. There is no clear distinction between post-structuralism and post-modernism, both often being used interchangeably (Cuff, Sharrock and Francis, 1998). Judged by their main fields of investigation or research, post-structuralists tend to attend to theoretical analyses of philosophy, language, power and knowledge, while post-modernists pay close attention to theoretical analyses of society, culture

and history.

Best and Kellner (1991) have contended that post-structuralism is the source of post-modernism, the latter using many of its ideas in developing theoretical, cultural and social positions. But post-modernism, might also be argued to have wider connotation than post-structuralism which might be regarded as included within it. Given such varied views it is not easy to clearly distinguish post-structuralism and post-modernism, indeed, such effort is doomed to end in failure (Biesta, 1995). Cuff, Sharrock and Francis (1998) also noted that problems might emerge if any general principles are regarded as definitively post-structuralist, given the diversity and inconsistency of such thought. Its core concepts have to be 'caught' in an attitude of deliberation (Sackney and Mitchell, 2002).

Among the main twentieth century post-structuralist thinkers were Foucault, Derrida and Deleuze. In Foucault's works, focus was laid on historical research in areas seldom dealt with in Western culture, such as madness, medicine, prison, and sexuality. He discussed how the subject is constructed by a variety of discourses or norms in the fields of power, knowledge and truth (Best and Kellner, 1991). Gutting (1998) indicated that the notion of power is the motif in Foucault's post-structuralism, having three key features: first, power is productive, creating new domains of knowledge and practice; second, power is everywhere, not limited by a single control centre but dispersed throughout the social system; third, power co-exists with knowledge in inextricable interrelation. Power is productive because it can create new domains of knowledge and practice that dominate people's behaviour as they rely on its discourse or norms as truths. According to Foucault, power produces certain kinds of people, including their characteristics and

behaviours; it also controls and produces the physical body programmed and exercised for efficiency and productivity (Capper, 1998). Power is everywhere and its exercise is hidden, operating when people seek to identify what is truth. In human society knowledge is closely related to power and can not be independent from it; power creates knowledge, internalised (made disciplinary) so as to dominate individuals; the more one knows; the more one is dominated by it. Power is not constant but can be redistributed or changed among groups or individuals. In interaction, people with power are more able to establish truth than people without power. Therefore, it is necessary to reflect upon, understand, expose and deconstruct what is truth.

Ontologically post-structuralism tends to historical or social relativism (Scheurich, 1994), deeming there is no reality in the world, social reality being formed in different historical times and under different conditions so that it is socially restrictive and historically relative. There is no constant or eternal reality in the world, even the human subject being constructed by society, history and language in changing time and space. Truth is relative, constructed by power, competition and normalisation in special historical time and space. Cuff, Sharrock and Francis (1998) contended that there are common structures models of thinking confining the mind of individual thinkers and schools in particular socio-historical conditions which Foucault called 'episteme'. In a certain era, only some thoughts are constructed in this episteme and although new ones develop from other models, they will not be successive but separated.

As to its epistemology and methodology, post-structuralism tends to adopt deconstruction-oriented views intended not to destroy but question text (any artifact of human activity that may be subject to interpretation). Deconstruction

is intended to open the structure of text for others, allowing them to grasp its overall composition and escape the constriction of their thoughts (Cuff, Sharrock and Francis, 1998). Post-structuralism opposes objective, basic and transcendent truth and knowledge, while its method of knowing is basically culture-bound (Lather, 1988); the value of truth and subjectivity can only be found through deconstruction. For Foucault interrelated and penetrating power and knowledge are the products of special history and are not constant, exercised in all social situations regardless of the forms they take (Anderson and Grinberg, 1998). Knowledge may be operated by technical and executive bureaucrats, unconsciously becoming the tool that serves power. Individuals, living within knowledge, cannot be aware that they become its prisoners (Cuff, Sharrock and Francis, 1998). The so-called operation of rationality is actually a power game. Unconscious domination is hidden behind rational, common consensus, such that we must rely on deconstruction to dissolve the crisis of being dominated. The features of deconstruction are displayed in objecting to cognitive conventions and subject decentring (Z. X. Huang, 2002). The concepts of difference and floating meaning are important in checking whether knowledge and language are restricted by language centralism; methods of reversal, intermittence, specialty and exteriority are advocated for: checking the dominant characteristics of knowledge logics; examining the nature of knowledge hegemony by avoiding mutual penetration of knowledge and power; getting rid of essentialism and accepting diversified voices (Z. X. Huang, 2002). Best and Kellner (1991: 60-61) indicated that in Foucault's later works focus shifts from technologies of domination, where subjects are dominated and objectified by others through discourses and practice, to technologies of the self, where individuals create their own identities through ethical practices of the self and form of self-constitution. He defines technologies of the self as practices which permit individuals to effect by their

own means or with the help of others, transformation in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality. That is to say, through techniques of the self, the subjectivities of individuals can avoid merely being constructed by power. Ethically individuals possess desires for freedom, autonomy, and self-government to oppose the dominance and suppression of power, while freedom is defined as mastery of and power over oneself (Best and Kellner, 1991: 65-66).

Cuff, Sharrock and Francis (1998: 291) indicated that post-structuralism would move beyond modernity and become post-modernity when it discarded the idea that there is an overall, rationalised order to social thought and progress in social development. Lyotard, one of the representatives of post-modernism, has argued that change of economic and productive structures results in change of the position of knowledge and that, particularly in this information age, knowledge itself becomes a productive force with dominant power and increasingly become a commodity. With economic globalisation activities cannot be controlled by any individual country so that production and control of knowledge becomes not only an economic phenomena but a political issue. Can governments reasonably control economic development? Lyotard indicated that postmodern society is obsessed with efficiency and effectiveness that has led to all kinds of businesses being judged in term of outcome and performance, their so-called performativity being linked with increasing accountability and surveillance (Perryman, 2006). Ball (2004: 143) indicated that 'performativity is a technology, a culture and a mode of regulation, or even a system of "terror" in Lyotard's word, that employs judgements, comparisons and displays as mean of control, attribution and change.' If it can be argued that control exists merely for the sake of economic development, should what Lyotard termed

performativity or Weber called means-end rationality, which focus only on efficiency and effectiveness, be questioned? Moreover, Baudrillard has depicted a view of modern, consumer society as reduced to symbolisation where people are dominated by signs. It is full of objects whose production is determined by exchange rather than use value engendered by capitalism that generates meaninglessness of life (Cuff, Sharrock and Francis, 1998). It is for such reasons that post-modernism casts doubts over scientific logic, generalisation, simplicity and dominance, viewing all systems, rules and even the subjects established by modern logic as intrinsically the outcomes or constructions of social dominance. The means of advancement and development stressed in modern society are actually tools of power and dominance, violating what ought to be regarded as the precondition of respecting human nature and diversity. On such grounds, post-modernists are against the unification, simplicity, obedience and evenness stressed by modernism and opposed to neglect and oppression of diversity and difference, claiming that the value of subjects should be respected and diversity of narratives, control without the symbols of capital and social difference and fragmentation affirmed; oppressive modernity and its formalistic logic should be reflected upon and improved.

3.2.5 Possible implications of different philosophical paradigms

Different paradigms problematise ontological, epistemological and methodological questions differently. For example, while positivism stresses that objective and orderly reality is possible in the world through objective, standardised and value-free scientific research, indicating approaches and principles to social science to describe, explain, predict and control human behaviour, naturalism attaches importance to the value of individual subjects

and their inseparability from context and inter-subjectivity. Yet both are oriented toward understanding the regulation and maintenance of social reality where behaviours are framed within a determinate social order and structure. Though positivist research means have been used historically to uncover conditions whose understanding is prerequisite to ameliorating 'social problems' and anthropological and Chicagoan interpretivists have long raised issues of the irreducibility of cultural formations (Jarvie, 1972) and procedural research questions, such as 'whose side are we on?' (Becker, 1963, 1970), critical theorists put the issues of whose voices have been silenced, and why, at the centre of their concerns. They ask whose interests *are* served by current structures of authority, believe that individuals should criticise those values, regulations and other belief systems taken for granted under given dispositions of power and ideology in human societies and should be liberated from material conditions through enlightenment and emancipation (S. K. Yang, 2002), heightened self-awareness and self-development. Post-structuralism thinks of the subject as constructed by various kinds of narratives and normalisations in the fields of power, knowledge and truth, deconstruction of which is prerequisite to understanding and loosening existing forms of legitimacy; self-monitoring must be relied upon to fight against unreasonable dominance and re-create subjects' meanings and values. Post-modernists, like post-structuralists, highlight decentralisation, pluralism and difference (W. Q. Xie, 2004). By offering critiques of disciplinary practices and their normalising effects, Foucault hoped to reveal and reactivate various forms of subjugated knowledge as autonomous, non-centralised forms (Anderson and Grinberg, 1998: 344). Moreover, Lyotard's doubts about performativity, and Baudrillard's opposition to capitalism that overstresses exchange value are further instances of post-structuralism and post-modernism highlighting self-reflection upon and

self-awareness of restriction of rationality and the unconscious effectivity of power control.

What are the possible bearings of the core concepts and stances of such different approaches to knowledge and understanding of the social? Do they have implications for our understanding of systems, such as PPM and do they afford help with clarifying our possible purpose in constructing or modifying such a system? Table 3.1 attempts to lay out what each of the paradigms that we have considered above might alert us to be aware of in PPM systems with respect of their attributes outlined in Chapter Two; attitude or orientation, models, personnel, management methods and techniques; performance criteria and standards, operational procedures and attitudes, cognitive interests and the characteristic, key point of critique that each would afford.

3.2.5.1 Attitudes or orientations

Those working in a positivist paradigm might regard PPM systems as having the character of objective and independent reality, containing a set of effective management principles for system operation. Those responsible for schools would tend to see themselves as using objective, scientific methods to construct a generalisable PPM system capable of improving or accounting for principals' performance, allowing a single, best model for all schools and principals. In contrast, from a naturalistic perspective, a PPM system would be regarded as a social reality constructed by relevant people with different backgrounds, characteristics and concerns. Planning PPM should seek to meet to the requirements of specific situations and highlight system adaptability to individuals and situations.

Table 3.1 How the four paradigms would lead us to conceive of PPM system

| Paradigms Items | Positivism | Naturalism | Critical theory | Post-structuralism/ post-modernism |
|--|--|---|--|--|
| Attitudes towards PPM system | 1. PPM system is an independent entity 2. Stress integration and consistency | 1. PPM system is constructed by people in organisations 2. Stress individuality and situation contingency | 1. PPM system is formed in negative dialectics 2. Stress reflection upon irrational dominance 3. Highlight equal communications, consensus and participation | 1. PPM system as regulation and supervision 2. Stress on undesirable dominance and authoritative control 3. Stresses diversification and self-regulation |
| Models of PPM system | Accountability and development model | 1. Development and accountability model 2. Contingency model | 1. Self-directed model 2. Development model | Self-directed model |
| Source of advisers and appraisers | 1. Supervisor 2. External experts | 1. Internal staff 2. Peers 2. External experts | 1. Self 2. Internal staff 3. Peers | 1. Self 2. Others' help |
| Management methods and techniques | 1. Objectivity and accuracy 2. Standardised measurement tools 3. Quantified measurement techniques | 1. Understanding of inter-subjectivity 2. Interpretation of meaning 3. Observation and interview techniques | 1. Equal dialogue 2. Self-reflection and criticism 3. 360 degree feedback technique | 1. Self-techniques 2. Ethical practice 3. Self generative |
| Performance criteria and standards | 1. Organisation objectives and job description 2. Common criteria and standards | 1. Consensual objectives 2. Individualised criteria and standards | 1. Consensual criteria and standards of truth 2. Stress reflective and critical criteria and standards | 1. Oppose normalised and consistent criteria and standards. 2. highlight criteria and standards for self-monitoring |
| Operation procedures and attitudes | 1. Prearranged programme 2. Objectivity and value-freedom | 1. Consensual procedures and attitude 2. Constant communication and value clarification | 1. Self reflective procedures set by oneself or collectively. 2. Equal and open communication and action | 1. Self reflective procedure set by oneself 2. Stress on constant ethic practice |
| Cognitive interests | Control by general laws which influence performance | Understand individual meanings and situational factors in performance. | Critique of irrational phenomena in PPM system | Check the normalisations of PPM system and the connotative relationship between knowledge and power that penetrate each other. |
| Key points | Helpful to planning a complete PPM system for improving principals' performance | Helpful in constructing a more humanly oriented PPM system for improving principals' performance and development | Helpful in discovering the shortcomings of PPM system and reflecting upon existing problems in practice. | Helpful to strengthening self-monitoring and individual ethical practice. |

In turn, critical theorists might well argue that any reasonable PPM system should be constructed by means of continuous and equal dialogue and consensus. Critical and reflective attitudes should be taken to examining whether it embodied unreasonable authority or ideological dominance. Its operation should enshrine equal rights of communication and dialogue for stakeholders and participation in decision-making, highlighting the importance of strengthened professional autonomy, responsibility and reflection. Even more definitively, post-structuralists would regard PPM as nothing other than a panoptic monitoring system whose disciplinary mechanisms are used to control performance. Once established, it will become a normalisation mechanism in which power begins to generate productive influence over principals who will become objects of surveillance to be regulated and dominated. Indeed, it has been argued that performance management in education has originated from State imputation to schools of a role in improving productivity deemed to be essential in coping with international economic competition and opposed by post-modernists (Ball, 1990; 1998; Boxley, 2003). Imbued with respect for subjects and ethical practice, post-structuralists and -modernists would be led to oppose establishment of PPM whose logic was dominance and authoritative control, wishing to countervail the commonplace view that while 'where there is organisation, there is management', constituted by a discourse of efficiency, effectiveness, and productivity and disciplinary in essence. While recognising that performativity is the product of postmodern society they hold that it must seek a less prescriptive system, respecting subjects and valuing pluralism. Post-structuralists and -modernists negativity toward PPM systems, especially when performance is used as the instrument of value exchange, recognised by awards or linked to pay, serves to remind educators that such systems can become panoptic if they lack critical reflection and problematisation of the taken-for-granted nature of dominant discourses.

The interesting question might be whether it is possible, through encouraging principals or other stakeholders to deconstruct or question regimes of truth, including those familiar and accepted, for PPM to avoid becoming disciplinary or normalising technique; is there escape from being dominated while, at the same time, being performance measured?.

3.2.5.2 Models of PPM systems

Positivists tend to view organisations as social realities characterised by target setting, order and regulation and to assume that planning a PPM system, should start from these and includes accountability and development. The naturalistically inclined tend to privilege their interactive construction, trust and unthreatening practice over putative needs of accountability. Those works within critical and post-structuralist approaches, stressing equal communication and dialogue without dominance in management processes, while critiquing the ideology of control lying behind conventional structures and mechanisms, would tend to privilege self-management or developmental approaches.

3.2.5.3 Source of advisers or appraisers

For positivists, appropriate PPM advisers or appraisers might well be external experts deemed to possess high professional capabilities and objectivity, capable of collecting data and making judgments accurately, objectively and fairly, so as to ensure the effectiveness of management processes. While not rejecting performance appraisal, naturalists lay emphasis on professional capabilities, familiarity with principal tasks and communicative abilities in advisers and appraisers. These may be found in both internal and external

experts. Those of critical and post modern persuasions, privileging self-reflection, critique of individual performance and pursuit of truth under, so far as possible, ideal speech conditions, in contexts of equal communication situations, tend to see the best advisers and appraisers as those enable to respect and communicate with principals, possibly drawn from principals themselves or other peers or colleagues capable of providing unthreatened feedback and enlightenment by means of rational, relatively equal communication. Rational working situations free of oppression and disciplinary elements should be sought, capable of maximizing the likelihood of ethical practice, critical reflection and the ability to problematise the take-for-granted nature of dominant discourse among practitioners.

3.2.5.4 Management methods and techniques

Positivists incline to PPM methods and techniques resting upon standardisation, objectivity and measurability while naturalists are more likely to see observation and talk, giving access deep, appropriately contexted understanding, as key management appraisal tools and techniques. Critical theorists would be expected to want to go even further in seeking continuous communication between advisers and principals in search of consensus, understanding and useful feedback on principal performance. The technique of '360 degree' or multiple-source feedback may be adopted as a reflection tool. Post-structuralists, opposing dominant, panoptic techniques, would seek progress through problem posing as an escape from enmeshment in the dynamics of power (Anderson and Grinberg, 1998). Self-reflection should establish principals' identification with their work.

3.2.5.5 Performance criteria and standards

For positivists, criteria and standards for measuring 'real' principal performance must be observable and objective, planned correspondingly to reflect school objectives and job descriptions. Criteria should not only be complete and reasonable but standards of performance set clearly and objectively in advance. For interpretivists, performance criteria and standards constructed consensually by stakeholders through consultation processes should not only correspond to school objectives but also highlight common performance areas, indicators and standards, thus created by advisers and principals, appropriate to diverse circumstances and needs. Critical theorists, again in common with post-structuralists, would want performance criteria and standards to be set bottom-up not top-down, based on consensus as to truth and remain appropriately context-sensitive or relative rather than a monolithic expression of authority serving to control or dominate principal performance. From a post-modernist perspective, performance criteria set should be deconstructed and the power of setting these and standards given back to principals, their signified subjects, in due deference to difference and pluralism and in the interests of critical reflection, ethical practice of self awareness and autonomy.

3.2.5.6 Operational procedures and attitudes

While in the hope of ensuring effectiveness and equal treatment positivism demands standardisation and validity in terms of procedures set beforehand in objectively judged performance appraisal, naturalism speaks of individually collected, appropriately contexted evidence acquired by advisers or other sources at interview with principals and sustained communication and cooperation between them. Critical theorists would want operating procedures

produced by truthful, equal, and open communication and dialogue, constantly questioned and reflected upon in the process of implementation, while post-structuralists would want procedures to be deconstructed, putting emphases on processes of self reflection and ethical practice.

3.2.5.7 Cognitive Interests

As we might expect, positivists privilege research on what are conceived of as the possible factors at work in determining principal performance and their access to its prediction and control, interpretivists mutual communications, dialogue and common understanding, critical theorists understanding of irrational power and ideological dominance and post-structuralists deconstruction of possible power penetration, dominance and control in management systems.

3.2.5.8 Key points of critique

If positivistic approaches point to the character of traditionally objective, accurate systems, naturalism highlights more humanistic virtues of communicating, cooperating and sharing consensus in promoting principals' performance improvement. At the same time, adopting a critical stance assists in highlighting shortcomings and problems in practice and point to management systems which are more self-aware and emphasise self improvement and development, just as post-structuralist and -modernist modalities can help in understanding the virtues of critically reflecting upon, deconstructing and resisting PPM texts.

However, the issue that this raises and which is intrinsic to the form of analysis

characterising this whole discussion is crystallised in the notion of whether critical and, even more particularly, post-structuralist and post-modernist stances leave anything behind but the rubble of deconstruction. This brings to the surface the character of the analytic work to which we have put these 'approaches'. The educational organisational structures within which we seek to embed PPM are essentially authoritative and modernist, existing within systems of central and local government as deliberate constructions to effect work of social and cultural control. They classically embody what Weber (1964) and others have referred to as rationality divided between position and expertise. We set them up to 'do good', to achieve agreed public ends and in order to do so find it appropriate to grant those who carry out their functions within them relative, sometimes uneasy, autonomy. Education, like other public and professional service areas, is constantly subject to the tensions of who runs them and calibrates the performance that arise from such tensions. When organisational goals were deemed to be clear and unambiguously 'owned', 'one best way' forms of solution to their technical and work practices appeared natural and positivistic social science appropriate to their understanding and as knowledge base to their social technologies. Once these were problematised and participant commitment seen to require 'management', interpretivist modalities of analysis and 'human relations' approaches to organisational functioning softened their hegemony. Declaring grand theories to be dead and structures to be inherently oppressive does very little for those who own, plan, run or analyse organisational settings except to increase their awareness of the complexity of power and control within them and the irremediably ideological character of their 'improvement'.

3.2.6 Summary

PPM is a social phenomenon of which we have assumed that different philosophical perspectives would permit us to entertain different ideas, hypotheses and explanations as to how particular exemplars of it might be designed, constructed and subsequently behave as a system. These have been presented as originating from diverse ontologies, epistemologies and methodologies, expressing differing views as to the very existence of reality. These views can be summarised as in Table 3.2.

Table 3.2 Four philosophical paradigms on reality

| | Absolute / objective | Relative / subjective |
|---------|---|---|
| Reality | Positivism paradigm (absolute truth) | Interpretive paradigm (relative truth) |
| History | Critical paradigm (negative truth) | Post-structuralism paradigm (changing truth) |

Positivist and critical paradigms hold that there is objective reality which, for the former, is deemed to be the real world while, for the latter, the real world is only virtual reality created by history. Interpretive and post-structuralist paradigms see only relative or changing social reality, vested in individuals and in discontinuous history, respectively. Individuals are limited by historical culture, so deconstruction and critical reflection is needed to understand changing truth and selves. Within them, reality and history, objectivity and subjectivity, absolute and relative become binary, opposed possibilities. Achieving their integration would be to succeed where hitherto there has only been conjecture.

We have already seen that systems of PPM are inevitably characterised by binary contradiction as to whether: they regard principals as objects or subjects; emphasise absolute performance objectives or relative objectives; and attach relative importance to principal performance or professional development. We have also begun to outline arguments for the importance of assuaging or avoiding conflict inherent in such dualities by, hopefully, coherent combination and compromise in planning and sustaining PPM activities. Intellectual honesty requires us to acknowledge that we are all positivists now, for example in employing 'objective' empirical techniques, even when we call ourselves interpretivists and seek to objectify meaningful behaviour and in recognising the legitimacy of organisational structures, power and authority. Yet we are all also now simultaneously post-modernists or –structuralists; ideology is exposed and we grasp that knowledge is power, not least in its withholding, and freedom presupposes a measure of equal communication. In professional domains it is not unreasonable, therefore, to expect that managers/advisers and principals should: act as 'cooperating partners', seeking to integrate subject and object relationships; consider target setting by 'common consensus objectives' so as to compromise the absolute and relative objectives; rely on the concept of 'sustainable improvement' to link up personal management, development and accountability activities; and regard the realistic and historic opposites of continuous development and contingency in relation to principals' capabilities and school conditions in particular, historically conditioned contexts, as capable of harmonisation - principal performance and school quality can be pointed at the same, desirable targets.

3.3 Psychological Analysis

Psychology deals with individual behaviours and mental processes examining, among other things, human development, learning, memory, cognition, feeling, abilities, personality, motives, emotion, social behaviour and abnormal behaviour (C. X. Zhang, 1989). In Chapter Two some individual factors which might be taken to influence principal performance, such as personality, cognition and abilities, work values and attitudes, work motivation and experience were examined conceptually. In order to understand these and the processes that influence them further it is necessary to turn to psychology, focusing mainly on three schools of thought or paradigms: behaviouristic, cognitive and humanistic, as they have been related to its managerialist forebears and may be related to PPM. Having examined their theoretical core concepts, particularly with respect to motivation theory, an attempt will be made to draw some implications as to how they might serve as guides in formulating and implementing PPM system effectively.

3.3.1 Behaviourism

Behaviourists have argued that the behaviours that individuals present are dependent on their adaptive outcomes toward circumstances encountered. The process of learning behaviours depends on strong linkage between stimulus and response and behaviour and consequence. Reinforcement theory holds that individuals' present or future behaviours are largely influenced by the consequence of rewards associated with past behaviour, that is to say, on outcomes of individual action being reinforced by positive rewards that would lead to their repetition in similar, stimulus situations, whereas actions leading to negative outcomes would tend to diminish.

Thorndike referred to this as the Law of Effect, while Skinner (1969) named it operant conditioning. Behaviourists, then, tend to be external determinists with respect of individual behaviours, emphasising the circumstances of planning extrinsic stimulation and reinforcement effects in facilitating individuals' behaviours and, according to Skinner, particular behaviours are reinforced through effects that follow them.

Presumably, managers could seek to employ such a device in order to enhance individual performance of positive and desirable behaviours in others and could also themselves be induced to undergo sustained improvement and development and avoid undesirable behaviours by provision of appropriate rewards, incentives and punishments. These might be derived commonsensically and agreed consensually, with emphasis on the former and use of the latter only as last resort. Indeed, reinforcement theory, the most acceptable tenet of behaviourism, is well applied in human resource management. According to their Organisational Behaviour Modification (OBM) model (Luthans and Kreitner, 1985), behaviour is a function of its contingent consequences. By understanding and modifying antecedents and consequences managers/advisers can increase, maintain, or reduce the frequency of employee behaviours. Thus, it can be applied to improve effectiveness of performance management efforts, supported by a growing body of empirical, follow-up research suggesting that the usage of OBM really has some influence (Stajkovic and Luthans, 1997; Waldersee and Luthans, 2001). In PPM operating processes it was suggested that sustained communication and dialogue between advisers and principals ought to be emphasised (see Section 2.2.4). If in interaction both can be provided with immediate feedback and appropriately applied reinforcement rationales, positive influence may be two-way, manager/advisers enhancing and

maintaining principal performance by way of positive encouragement and principals influencing advisers' attitudes and performance through positive response. In addition, if both of them can present friendly and active communication and dialogue, sustained two-way communication and may be established in a climate of trust (Waldersee and Luthans, 2001) and managers/advisers can adopt a strategy of successive approximation to facilitate principal performance.

Behaviouristic emphasis on immediate, contingent reinforcement of behaviours would imply that managers/advisers should provide timely feedback and guidance for principals according to agreed objectives and key criteria, followed by positive reinforcement of performance outcomes that have been achieved. If performance management is orientated to development, principals should be required to set up and thoroughly implement improvement strategies while, if its purpose is accountability, it will simply rest upon previously agreed performance rewards.

3.3.2 Cognitive theory

Cognitive theorists have argued that individual behaviours are outcomes of recognition, understanding and comprehension leading to change in individual internal mental processes, not characterised by the exogenous, passive, and fragmentary linkages of external stimulation-response but in ways which are endogenous, spontaneous, and comprehensive. Individual cognition and understanding of causal relationships are paramount. Waldersee and Luthans (2001: 395) indicated that the applications of cognitive theory in performance management mainly focus on process theories of motivation, such as goal-setting, equity and expectancy theories.

Lock (1978: 595) indicated that goal setting is the most directly useful motivation approach in a managerial context, though acceptance of and commitment to it by employees was contingent on its perception as fair and reasonable and their trust in management (Latham and Locke, 1979). Expectancy theory argued that employees tend to rationally appraise their behaviours on the job and will choose those that can effectively achieve the most valuable objectives (Vroom, 1964). Equity theory has tried to explain how employees respond to perceived unfair treatment in organisations (Adams, 1963).

Bandura (1977; 1986), proposing social learning/cognitive theory as an attempt to integrate behavioural and cognitive theories, paid special attention to three factors affecting individual learning (Bandura, 1969; 1977; 1982; 1986; Davies and Luthans, 1980; Robbins, 2001). The first was vicarious learning, referring to imitative learning based on observation of others (substitutors) to achieve a particular behaviour and its outcomes. He argued that individuals' behaviour learning and change processes were not necessarily dependent directly on outcomes which had been reinforced or punished but could be influenced by observing the contingent consequences of others' behaviours in certain situations (Bandura, 1977). Thus, observational and modelling learning became important sources of individual behaviour change. The second was self-regulation, signifying ability to direct one's own actions and behaviours without pressure, setting goals and achieving self-monitoring and self-enhancement (Bandura, 1991). The third was self-efficacy, referring to individuals' beliefs in their own capabilities to perform a behaviour (Bandura, 1997), those with high levels tending to choose challenging work and objectives, tending to have greater motivation and involvement in their work, deeply confident that they stand to succeed as long as they produce the

requisite effort. Levels of individual self-efficacy, among other things, related to previous experience of failure or success, observation of and learning from others' and their affirmation, enhancement of capabilities and individual psychological stress. Moreover, individual meta-cognition, thinking about thinking or the self monitoring and control of thought (Martinez, 2006: 696), can also lead learners to understand, clarify, select, evaluate, and revise their cognitive goals, tasks, and strategies (Flavell, 1979).

Cognitive theories emphasis on the importance of individual recognition and judgmental processes has obvious implication for the operation of any system of PPM, suggesting the importance of principals' participation from its formulation and the usefulness of engendering their commitment to a perception of its fairness (Adams, 1963), work-satisfaction (Herzberg, 1966) and expected outcomes (Vroom, 1964). The assumptions that individuals possess the rationality and cognitive abilities that enable them to initiate judgment and appraisal, that their behaviours are purposeful, goal directed, and largely based on conscious intention that may involve in their own desires and expected objectives, suggest that they will strive to achieve objectives by rational calculation of probabilities and outcomes, choosing those behaviours that they believe will lead to the most valued individual or institutional rewards. Bandura (1986; 1991) suggested three steps of: observation of one's own performance; setting one's own performance standards and comparing actual performance with targets in order to understand progression; and producing further motivation and self-reaction/reinforcement in terms of which individuals reward or punish themselves. He argued that self-efficacy could be enhanced by achieving expected objectives and determining work-related performance (Bandura, 1982). Such self-regulation and -management may be suited to principals strong on initiative, cognitive abilities and experiences and

capable of improvement, among other things, if provided with appropriate feedback from external advisers, particularly of the sort that assists in nurturing meta-cognitive abilities, enhancing self-knowledge, clarity, reflection and critique. Providing fair and reasonable performance outcomes based on capabilities and actual performance and rational rewards or consequences expected by principals may be expected to generate substantial, positive effects of motivation and identification among them.

3.3.3 Humanistic theory

Humanistic theories emerged in the 1950s in reaction to both behaviorism and psychoanalysis led by psychologists, such as Abraham Maslow and Carl Rogers, who contended that human nature was essentially positive and good (Rogers, 1972) and that everyone was disposed or motivated to pursue self-actualisation (Maslow, 1970). Unlike behaviourists they believed that humans are not solely the product of their environment but that individuals' behaviours were primarily determined by their perceptions of the world. They were internally directed and motivated to fulfil their potential through cognitively based goal-setting and goal-striving processes (Cassel and Reiger, 2000). Humanistic theorists hold a hopeful and constructive view of human beings and their capacity of self-determination, focussing on facilitation of self-esteem, self-fulfilment, and personal development. Maslow (1970) developed a hierarchical theory of human motivation which asserted that, once certain basic needs were satisfied, higher motives self-actualisation could emerge. Rogers (1972), from a person-centred viewpoint, held that full self-fulfilment could be achieved if individuals learned how to trust their own judgment and feelings in environments characterized by genuineness, acceptance, and empathy.

If managers/advisers were to take seriously humanistic theories' stress on humans' inborn possession of motivation for proactively pursuing growth and self-fulfilment they would, no doubt, regard it as paramount that they provided appropriate environments and opportunities for principals to fulfil or actualise themselves through constantly striving to engage in their work, to achieve success and development. This process might usefully start at the formulation stage of a PPM system, with adequate understanding of purpose in relation to intrinsic motivation, individual self-fulfilment and institutional goals.

Although cognitive theorists also claim that managers/advisers should be concerned with principals' internal mental processes and provide environments which correspond to their expectations and satisfaction, humanistic theorists tend to place more emphasis on individual, internal motivation in pursuing self-actualisation. Recognition that essentially good individuals have different motivations in relation to their needs should incline managers/advisers to display understanding of them in respectful, accepting and empathetic manner, inducing in them admiration of their own and others' excellent performance. Helping them to set and pursue high objectives performance ought not to be inimical to self-actualisation of ideals of career development and actively striving toward its realisation. The most important task for managers becomes to appropriately communicate and combine schools' and principals' objectives within their self-fulfilment and growth aims, greatly concerning individual self-management and development through continuous professional development stressing intrinsic, spontaneous motivation rather than external pressure. In such processes, managers/advisers are best pictured as helping principals to realise deeper meanings of learning and growth for themselves, encouraging motivation

toward active planning, participation learning and engagement in school management.

3.3.4 The implications of motivation theories for PPM

Silver (1983) argued that human behaviours are created by states of arousal or internal tensions, such tension states acting as energy sources for actions which, when brought into a specific direction, form a drive. In any organisation individual work motivation can function as the main, driving source for performance and play a crucial role in the field of organisational management. Motivation is power, usually with specific direction, intensity and persistence that can propel individuals to demonstrate certain behaviours. Understanding individual work motivation would require probing into personal and environmental factors that provide such intensity and direction (Steers and Black, 1994). Generalising the views of scholars (Locke and Latham, 2004; Steers, Mowday and Shapiro, 2004), work motivation can be taken to refer to the mental states and derivative behaviours, including persistence and involvement, that individuals exhibit in relation to work objectives under the interactive influences of internal and external environmental factors. In a work environment motivations can produce effects not only on the skills that individuals learn but also on how they will apply them and exhibit expected organisational performance behaviours.

The earliest studies of human motivation date from the Greek philosophers and focus on the concept of hedonism as a principal driving force in behaviour (Steers, Mowday and Shapiro, 2004) and not until the end of the nineteenth century did studies of motivation switch from the domain of philosophy to the field of psychology, to be originally focused on instinct theories. By the 1920s,

influenced by behaviourism, drive or reinforcement theories of motivation replaced instinct theories and in 1930s, as a result of the Hawthorne studies, social science focus on management began to shift to the impact of social factors on individual behaviours. In the 1950s a number of theories that were later called content theories of motivation were put forward in succession, including Maslow's (1954), hierarchy of needs theory, Alderfer's (1969, 1972) ERG theory, and Herzberg's (1966) motivation-hygiene theory. These constituted a new start in the theorisation of motivation processes, where the dynamism of cognitive theories was used to understand psychological processes of selecting individual behaviours. Process theories sought to uncover causal relationships as to what inspired individuals to exhibit particular behaviours in work contexts, developing approaches, such as Vroom's (1964) expectancy theory, Adams' (1963) equity theory, procedural justice theory, Locke's (1968, 1996) goal-setting theory and Weiner's (1985, 1986) attribution theory. Each of these and their possible bearing on systems of PPM will be outlined below.

3.3.4.1 Content theories

Content theories were mainly about internal and external factors inducing intentional behaviours of individuals, including individual needs, internal instinctive motivations, values and job characteristics, pictured hierarchically and included the work of Maslow, Alderfer, and Herzberg. Their structures are compared in Table 3.3.

Table 3.3 The structures of three motivation content theories

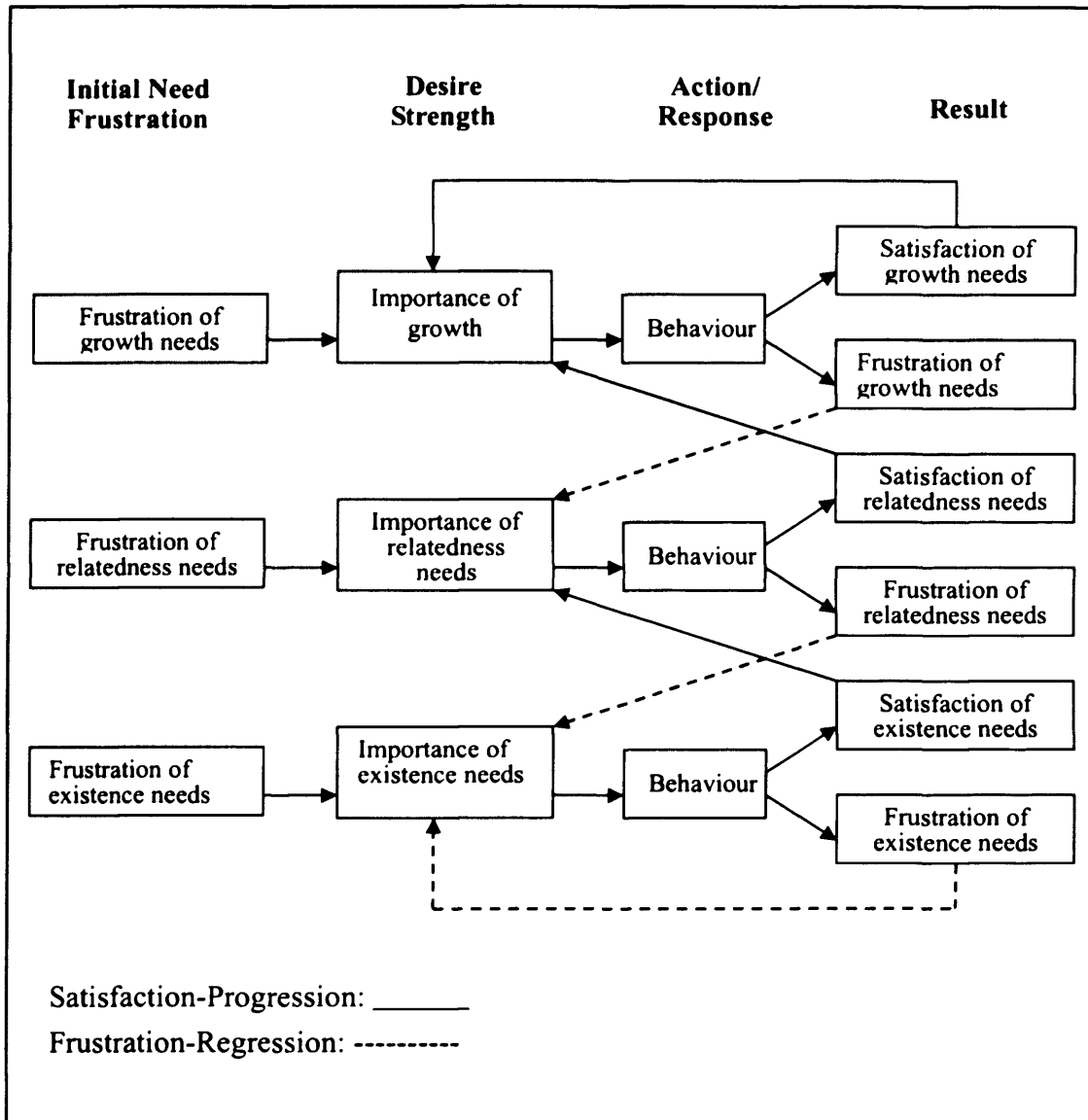
| Maslow | Alderfer | Herzberg |
|---------------------------|-------------------|-----------------|
| Self-actualisation needs | Growth needs | motivators |
| Esteem needs | | |
| Belongingness needs | Relatedness needs | hygiene factors |
| Safety and security needs | Existence needs | |
| Physiological Needs | | |

3.3.4.1.1 Maslow's hierarchy of needs theory

According to Maslow (1970), human beings possess different, innate motivations, hierarchically structured in terms of their prepotency, such that only when lower ones are satisfied are individuals stimulated to pursue higher ones. Maslow's hierarchy of needs, arranged in such a sequence of lower to higher levels, were physiological, safety, belongingness and love, self-esteem and self-actualisation. Later, Maslow added two extra needs alongside self-esteem, the need to know and understand and aesthetic needs, giving seven in total. The first four represented 'deficiency needs' prerequisite to development of healthy personality; while the last three represented 'growth or being needs' related to individual achievement and potential. Only when needs at lower hierarchical levels were satisfied could individuals produce motivation in pursuit of those at a higher level. Whereas when individuals have satisfied their deficiency needs motivation for their continued pursuit will be decreased, when such needs at higher hierarchical levels are satisfied individuals will continue to seek their further achievement, for instance, concerning knowledge and understanding, aesthetics and self-fulfilment (Maslow, 1968).

3.3.4.1.2 Alderfer's ERG theory

Alderfer (1969, 1972) combined Maslow's original five hierarchical needs to encompass just three, for existence, relatedness, and growth. The first was tantamount to the physiological and safety needs described by Maslow, relatedness was associated with interpersonal interaction, the equivalent of social needs of belongingness and love, while growth needs concerned the interaction of individuals and environment and were equal to Maslow's self-esteem and self-fulfilment. Both contended that unsatisfied individual needs create motivations for their continual pursuit and, when those at lower levels were satisfied, individuals would pursue those at higher levels. Both also agreed that when needs at higher levels were satisfied, their importance increased. However, Alderfer (1972) differed from Maslow in that, whereas Maslow believed that prepotency existed between various hierarchical levels of need, he deemed that individuals were likely to have the motivation to pursue more than one need at a time. While Maslow believed that the five needs should be classified as low to high in a level by level, ascending sequence, without regression, Alderfer held that when it was impossible to satisfy individual needs at higher hierarchical levels individuals would turn to seek satisfaction of those needs at lower ones in a process of 'frustration-regression' (see Figure 3.1).



Resource: Steers, R. M. and Black, J. S. (1994). *Organisational behavior (5th ed.)* (p.145).
 New York: HarperCollins College Publishers.

Figure 3.1 Framework of satisfaction-progression and frustration-regression components of ERG theory

Alderfer (1972) indicated that when individuals were frustrated at failure to satisfy a need its importance would increase, spurring action to seek satisfaction. If successful, the importance of needs at higher hierarchical levels would be enhanced and further actions continue to be taken. If frustration takes place in fulfilment of this need, the importance of needs at

lower levels will be increased and their satisfaction pursued.

On the basis of such ideas, PPM managers/advisers might be well advised to seek to understand how the individual needs of principals are satisfied, not least as a basis to stimulate their further motivation and efforts and the importance of providing support for their satisfaction, such as an environment free from fears or security threats and partnership based on cooperation and sharing, furnishing them with constructive incentives and assistance when they show the signs of frustration and regression.

3.3.4.1.3 Herzberg's motivation-hygiene theory

The core concepts of Herzberg's (1966) 'two factor theory' indicate that those affecting employee satisfaction or dissatisfaction about their work exist in different combinations, the former termed 'motivators' or 'satisfiers' involving achievements, recognition, work itself, responsibility, advancement, and growth and regarded as intrinsic, inducing sense of satisfaction when provided by organisations as adequate motivators. The latter, employee dissatisfaction, is chiefly elicited by eight 'hygiene factors' or 'dissatisfiers', including company policy and administration, supervision-technical, salary, working conditions, interpersonal relations, status, security and personal life, the majority not directly related with work itself and termed extrinsic whose inadequate supply can give rise to a sense of dissatisfaction among employees but whose good and sufficient provision cannot of themselves result in employee satisfaction. This conceptual framework is shown in the Figure 3.2.

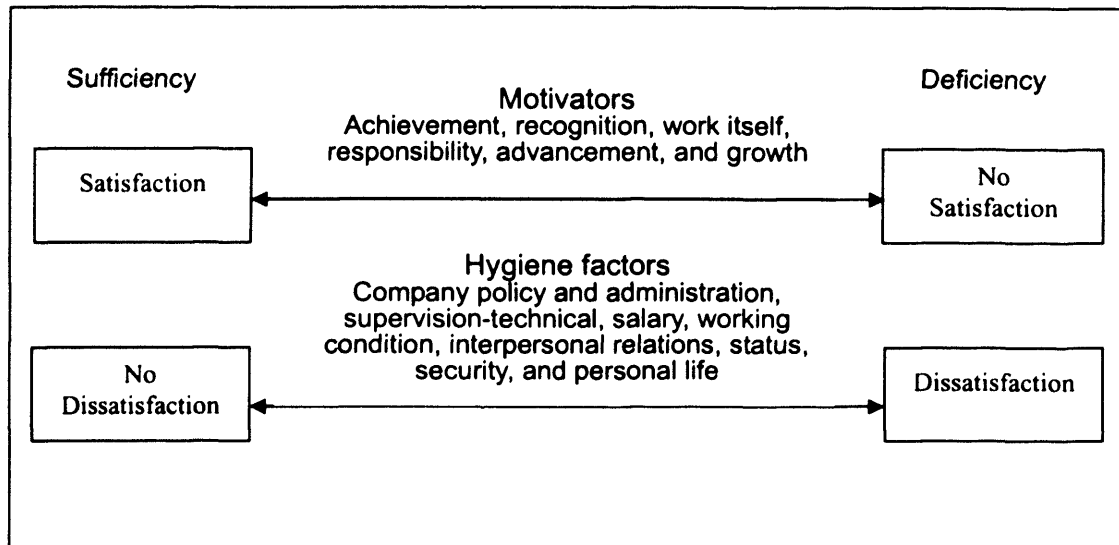


Figure 3.2 The two factor structure of Motivation-Hygiene theory

Herzberg's theory might incline PPM managers/advisers to provide principals with appropriate motivators, such as sense of achievement, recognition and work responsibility to assist them in acquiring professional growth and work satisfaction, as well as attending to hygiene factors by establishing good mutual relationship with principals, free of threat.

3.3.4.2 Process Theories

While content theories of motivation try to explain what motivates individuals, process theories mainly focus on how and why they decide which specific behaviours to perform, determined by the interaction of internal recognition processes and causal relationships that induce individual motivation or effort. They include Vroom's (1964) expectancy theory, Adams' (1963) equity theory, Locke's (1968, 1996) goal-setting theories, procedural justice theory, and Weiner's (1985, 1986) attribution theory.

3.3.4.2.1 Vroom's expectancy theory

Vroom's (1964) expectancy theory is based on the assumptions that there are diverse desires, needs, and objectives among individuals that may vary with changes in the environment and individual experiences about which individuals can make choices with rationality and reasonableness, based on experiential learning (W. Q. Xie, 2004). As the leading process theory, it regards motivation as a kind of internal force with its own directions and intensities, consisting of expectancy and instrumentality, as shown in Figure 3.3 (Silver, 1983: 322).

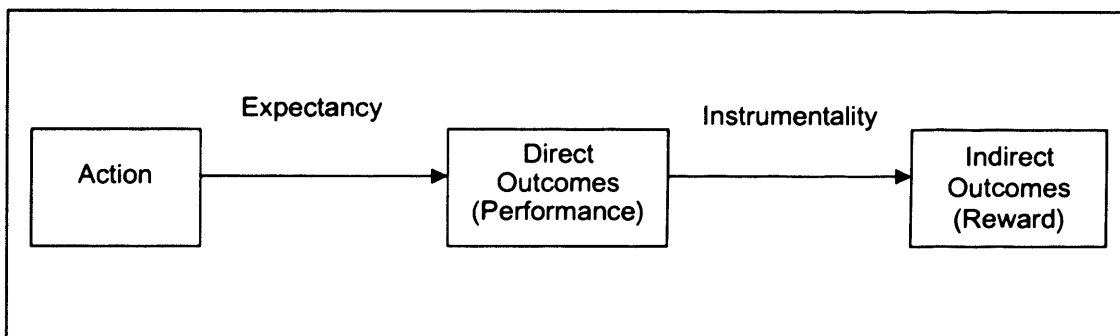


Figure 3.3 Correlation of expectancy with instrumental values in motivation expectancy theory

Source: Silver, P. F. (1983). Educational administration: Theoretical perspectives on practice and research (p.322). New York: Harper & Row.

Individuals have both expectations of direct outcomes of their actions and views of their instrumentality in terms of indirect and direct outcomes. Expectancy and instrumentality are both affected by the valences of outcomes. Silver (1983) illustrated the relationships between force, valences, expectancy, outcomes, instrumentality and action, as in Figure 3.4. Force

facilitates the actions of individuals as a kind of internal energy or arousal state that possesses direction and intensity. Both the direction and intensity of this drive will be influenced either by the valences of direct outcomes of actions or expectancy of the fulfilment of such outcomes. Valences refer to levels of attraction or repulsion of certain specific objects, signifying consciousness of subjective preferences, positive when attractive, zero when unattractive and negative when detestable. Expectancy: refers to the views of individuals as to the possibility that an action can create specific outcomes, ranging from 'surely' to 'surely not', serving as the driving force to determine whether individuals would take actions. Outcomes refer to the perceived results of actions, direct and indirect. For instance, the direct outcome of buying a laptop computer from the manufacturer is acquisition of this product, while indirect outcomes can be seen as those gained from first-level outcomes as more remote results of actions (Silver, 1983: 325). For example, this laptop computer can help teachers to improve the effects of teaching programs. Instrumentality refers to the views of individuals on the possibility that direct outcomes can lead to or avoid indirect outcomes which are, in essence, perceptions of the correlation between direct and indirect outcomes. Intensities of such a correlation would also vary from 'must take place' to 'must not take place'.

Individuals would make rational assessment of various possibilities before taking action in two steps, firstly evaluating the attractions of indirect outcomes (instrumentalities), and then assessing the possibilities of acting to reach direct outcomes (expectancy). If they believe that they can perform at high level, the actions will be taken. Expectation theory is not only concerned that rewards should be based on performance but that individuals should have the capabilities necessary to perform at a high level and accurately

perceive this to be the case.

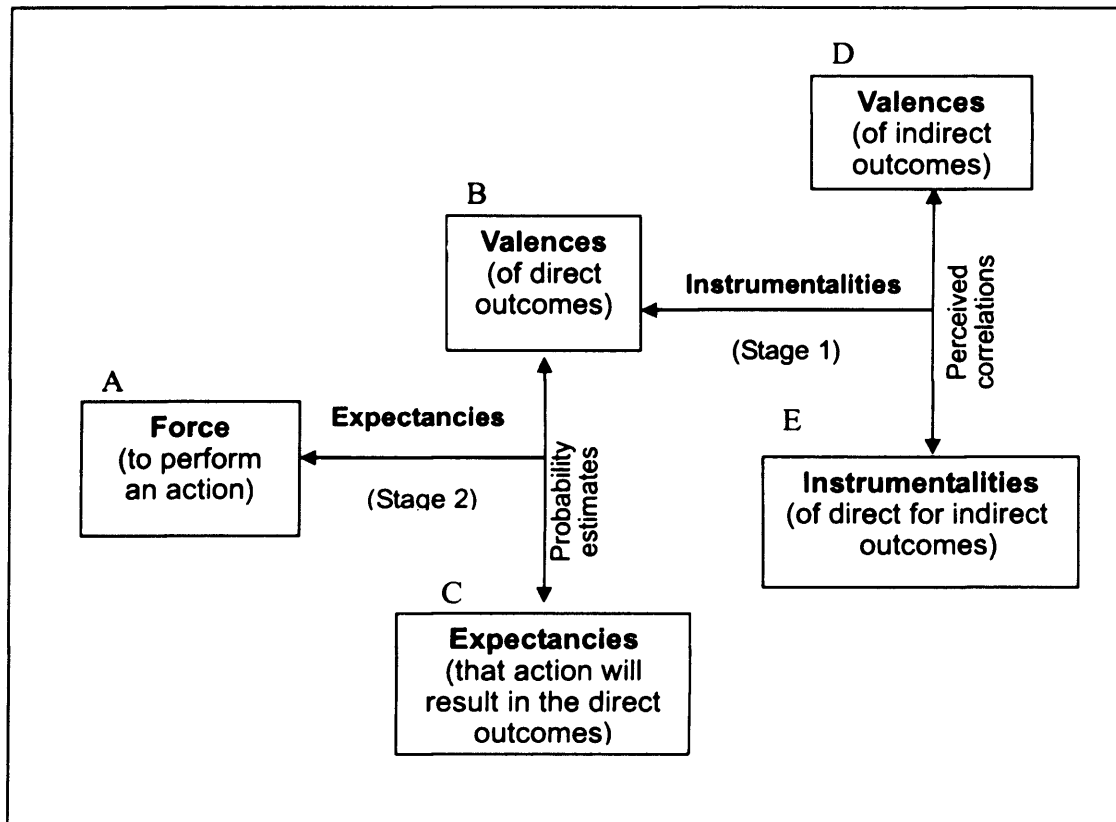


Figure 3.4 Relationship among major constructs in expectancy theory of motivation

Resource: Silver, P. F. (1983). Educational administration: Theoretical perspectives on practice and research (p.328). New York: Harper & Row.

As to PPM systems, the notion that the performance behaviours of principals are affected by their perception of and possibility of action-performance and performance-rewards would suggest the good sense of managers/advisers communicating with principals concerning specification of performance standards to be followed and assisting them to enhance professional capabilities in such ways as increase their possibilities of fulfilling them. Moreover, in doing so, it might be wise to take into account their preferences for indirect outcomes in designing possible inducements to their growth and

advancement, commendation and rewards offered for their performances.

3.3.4.2.2 Equity theory

Adams' (1963) theory holds that equity is the leading consideration influencing formation of individual motivation, derived from comparison of the ratio of individual input to acquired outcomes with that of others. If such comparisons are in a state of equity there will be the greatest work motivation for individuals; if otherwise, individuals will take action to restore equity, or even leave the organisation. Individual inputs to work may include, among others, education and training, knowledge and competencies, experiences, efforts and time, producing outcomes which may include salaries and compensation, benefits, status, promotion, job security, recognition, sense of achievement, job satisfaction and other forms of valued, individual feedback. These are subjectively compared with those acquired by 'reference persons', individuals regarded as similar, such as colleagues, persons in other groups, the self in the past or expectations for oneself, leading either to a state of equity, where the ratio of personal input to outcomes is identical to that of reference persons, or 'overpayment' or 'underpayment' inequity, eliciting internal tension and displeasure, motivating action to restore equity, either through overt or explanatory behaviours, including changing one's own input or outcomes, changing the input or outcomes of comparison objects, changing perceptions of inequity or the objects of comparison and leaving the job or organization or forcing opponents to leave.

Equity theory would suggest that PPM systems ensure that principals perceive what counts as equitable treatment, reasonable, objective settings, appropriate performance feedback and accurate appraisal, such as reflect

their inputs and efforts correctly and enable their performances to gain the compensation or feedback they deserve. Principals' consciousness of inequity should be met with immediate improvement or reasonable explanation showing understanding of their feelings, including clarification and explanation of erroneous perceptions, making reasonable changes and adjustments to unfair treatment and providing appropriate incentives for those who have not acquired deserved outcomes. These should include feedback on and acknowledgement and commendation of principals' excellent performance not only in terms of remuneration but also other criteria, such as sense of achievement and acknowledgement and job satisfaction.

3.3.4.2.3 Procedural justice theory

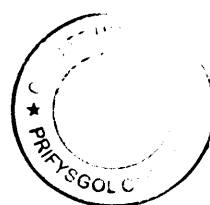
Since equity theory tends to focus on distributive aspects of outcomes across employees in pursuit of high levels of motivation it tends to ignore procedural equity. Some scholars have argued that individual perceptions of procedural equity in allocatory processes are also important influences on the work motivation of organisational members (Folger and Konovsky, 1989; Greenberg, 1990). Thibaut and Walker (1975) typically represented those earliest scholars studying procedural justice theory, their research focussing on procedural justice in disputes seen as handled in two stages, process control of adducing evidence and decision control resting on its evaluation, studies discovering that where arbitrators took control of decision-making, allowing disputing parties control of the process, they developed favourable perceptions of equity concerning outcomes (Thibaut and Walker, 1975; Walker, Lind and Thibaut, 1979). Later, Leventhal, Karuza and Fry (1980) proposed the usefulness of allocation preference theory from the perspective of procedural justice in respect of organisational resources, putting forward six

principles as criteria, verification, consistency of allocation procedures, accuracy of information, representativeness in fully reflecting the opinions and issues of all parties, bias suppression, ensuring avoidance of individual prejudices in distribution procedures, correctability and the rule of moral and ethical standards acceptable to common people in their operation. In any organisation, whether in the settlement of disputes or procedures of allocation, employees' perceptions of procedural equity tends to affect their motivation to achieve performances, recognition of procedural equity encouraging higher performance to acquire larger shares in distribution.

The procedural justice theory literature suggests three main factors affecting procedural equity (George and Jones, 2004; Greenberg, 1986, 1990; Linda and Tyler, 1988): managerial sincerity and courteousness to employees and respect for their views on decision-making procedures; adherence to reasonable decision-making procedures; and explanation to employees about inputs assessed, standards appraised and outcomes treated. These appear to be of some self-evident relevance to PPM procedures here.

3.3.4.2.4 Goal-setting theory

Studies carried out by Locke (1968, 1996) and Locke and Latham (1990, 2002) have contended that all individuals have their own values, emotions and desires and set themselves goals in order to achieve them that can have four types of motivating function: forming the focus of individual attention; stimulating individual efforts; intensifying individual persistence in work; and facilitating development of individual strategies and action plans. To kindle more individual work motivation, emphasis is laid on principles of setting challenging but attainable, specific and acceptable goals, with real-time



feedback. Studies have shown that when individual goal settings are challenging, definite and attainable, individual expectancy for their achievement, as well as the instrumentality and attraction of such goals, will be enhanced (Austin and Klein, 1996; Locke and Latham, 1990, 2002), especially when individuals receive continuous feedback on their achievement. While definite and difficult goals can intensify work motivation, if individuals lack the high performance capabilities they require, they may prove dysfunctional and inhibit desirable motivation (George and Jones, 2004). Again, the possible implications here of such goal-setting for PPM systems seem less than mysterious.

3.3.4.2.5 Weiner's attribution theory

Attribution theory concerns how individuals make explanations of the cause of what happens, as well as how such explanations influence their thoughts and subsequent behaviours. Heider (1958) first advocated attribution theory, which Weiner (1974, 1986) and his colleagues (Jones, Kannouse, Kelley, Nisbett, Valins, and Weiner, 1972) further developed. It assumes that individuals will seek to explain reasons for their own or others' behaviours and such explanations or attribution will determine subsequent, individual behaviours and emotional responses to success or failure (Weiner, 1980). Weiner (1974, 1986) proposed three processes of individual attribution: perception and observation of behaviours; belief that they are intentional; and determination of belief that others are forced to display such behaviours (situational attribution) or not (internal attribution). Weiner's early studies (1974), based on the views of Heider, argued that there are four types of individual attribution of success and failure, ability, effort, task difficulty and luck, further divided into two levels: locus of control and stability. In later

studies (Weiner, 1985, 1986) these were further expanded to three levels and analysis of influences of attribution, with respect of emotions added.

Locus of control indicated the extent to which individual attribution can be kept within internal or external control, among the four types of attributions effort and ability representing internal control, while task difficulty and luck signified external control. At the emotional level, internal and external attribution of individual success and failure influenced individual self-esteem and pride (self-orientations). Stability concerns the extent to which the type of attribution can be changed in correspondence with shifts in time and situations, ability and task difficulty serving as factors of stability, effort and luck instability. At the emotional level, stability attribution of individual success and failure can affect individual helplessness or helpfulness (self-orientations).

In turn, controllability: refers to the extent to which attribution can be controlled by individual wills, where effort is the controllable factor, while ability, task difficulty and luck are uncontrollable, though sometimes ability can be also a controllable factor, if it can be developed or improved in working environments. At the emotional level, controllability of individual success and failure can have effects on shame and guilt (self-orientations), as well as anger, thankfulness and commiseration (other-orientations). Four possible sources of attribution and the structures of their correlation on the three levels of attribution are shown in Table 3.4. It shows ability as a kind of internal, stable and uncontrollable attribution; effort as a kind of internal, unstable and controllable attribution, task difficulty as a kind of external, stable and uncontrollable attribution and the luck as a kind of external, unstable and uncontrollable attribution.

Table 3.4 Four types of attribution and their attributes in Weiner's attribution theory

| Attribution Source | Levels of attribution | | | | | |
|-----------------------|-----------------------|----------|-----------|----------|-----------------|----------------|
| | local of control | | stability | | controllability | |
| | internal | external | stable | unstable | controllable | uncontrollable |
| Ability | ✓ | | ✓ | | * | ✓ |
| Effort | ✓ | | | ✓ | ✓ | |
| Task Difficulty | | ✓ | ✓ | | | ✓ |
| Luck | | ✓ | | ✓ | | ✓ |

Notes: *Sometimes, ability is also attributed to the factors of controllability, as determined by whether individual abilities needed for work can be developed.

Source: Weiner, B. (1986). *An attribution theory of motivation and emotion*. New York: Springer-Verlag.

Over various studies, Weiner (1986) discovered that attribution of success and failure by individuals affected expectancies of future performances. In respect of relevant failure events individuals attributing it to unstable factors (efforts and luck) would still have quite high expectancies for future performances, despite current failure. In contrast, individuals tend to have lower expectancies if failure is attributed to stability factors (ability and task difficulty). Moreover, in attribution of relevant success events, individuals attributing success to such stable factors tend to have quite high expectancies for future performances, in contrast to those who have lower expectancies when success is attributed to unstable factors (efforts and luck); individual expectancies for future success are, thus, mainly influenced by stability attribution (efforts and task difficulty), stability representing absence of change. In this way, succeeders continue to succeed and losers to fail. If success and failure are attributed to instability factors (effort and luck) the possibility of change in future remains and they are less influential as a result.

In research on the attribution of controllability, if individuals attribute their failure to effort (controllable, internal, and unstable), such as insufficient

preparation, they still tend to hold expectancy for success in future but have low self-esteem and a sense of guiltiness for absence of proper preparation. But long term, unsuccessful employees usually tend to attribute their failure to ability (uncontrollable, internal, and stable) and tend to have no hope for future success, having low self-esteem, helplessness and ashamedness as a result. Emotionally Weiner (1986) believed that individual attribution processes affected self-directed or other-directed emotional responses, such as: pride, self-esteem, helplessness, helpfulness, ashamedness and sense of guiltiness (self-orientations) and anger, thankful and commiseration (other orientations). If individual performance is bad, unexpected or important much emotional response will be produced in the process of attribution, generating effects on future goal setting and expectancies of performance. Moreover, internal, external, and controllability attribution can produce various emotional responses and affect individual motivation toward future performances.

From the view of Weiner's attribution theory, PPM managers/advisers should try to understand and guide principals' attributions to internal factors (ability and efforts) and controllability attribution (effort). The principals should also be assisted to promote capabilities needed for fulfilling performance objectives so that ability attribution is held at controllable levels. Active help in preventing repeated failure and facilitating success should be concerned by managers/advisers in assisting avoidance of such emotional responses as low self-esteem, helplessness and ashamedness.

3.3.5 Summary

Commonsensically, principals' performances are subject to the influence of their individual personalities, recognition and abilities, work values and

attitudes, work motivation and work experiences. Understanding and grasping these issues is enhanced by interrogating them with relevant psychological theories. Three schools of psychology denoted as behaviourism, cognitive and humanistic theory offer sharply differing perspectives, privileging external environmental control, internal psychological process and a view of human nature as essentially good, respectively. Their implications may be used in planning, implementation and outcome processing of PPM projects. Moreover, content theories of motivation which picture how internal needs and perceptions may determine individual behaviours and performances, are argued to be capable of helping managers/advisers to understand and respond to principals' motivations and needs. Finally, process theories concerning expectancy, equity, procedural justice, goal-setting and attribution can also assist in understanding the performance motivations and perception processes of managers/advisers and principals and how to intensify them.

3.4 Administrative Analysis

Administrative theory is concerned with organisational functioning, historically much concerned with methods for facilitating their efficiency, effectiveness and productivity, not least in education where, as elsewhere, it is increasingly assumed that institutional success in reaching objectives entails systematic leadership and management processes. In such a cultural context, PPM has received a great deal of attention in the past ten years. In this section of the literature review, it is hoped to adduce the character of administrative analysis and its possible application to formulating and applying PPM processes designed to improve principal performance. To this end, an analysis of management concepts and theories from different time periods is useful in

comprehending their background and operation. Administrative and management theorising has a history of over one hundred years and displays a typically luxurious, current, social science array of existing positions. These may be broadly grouped, as to origins, into three phases of administrative theory development: Classical Scientific Management, Human Relations and Behavioural Science, and Systems Theory. Newer concepts of obvious face-relevance to PPM policy, such as Total Quality Management, Human Resource Management and New Public Management will also be examined and discussed in some depth.

3.4.1 The three phases of administrative theory

Over time social environments, life styles and ways of thinking change, including what passes for management theorising. Although we may now be thoroughly inured to approaching the construction of PPM systems in an intellectual climate saturated by ideas of total quality, human resource and new public management, the roots of ideas of effective management are highly diverse and have been subject to numerous elisions (Hanson, 2003; Pearce, 1989). While some scholars classify historical development of the field into three phases (Hoy and Miskel, 2001; W. Q. Xie, 2004; Scott, 2003), others distinguish four (Hanson, 2003; Lin, Wu, Zhang, Tang, Ting, Zhou and Cai, 2003; M. Q. Qin, 1998). Most are presented in terms of linear time lines and all are affected by contemporaneous social science preferences. There are two broad approaches to classification, one based on the main schools of administrative theory, such as Classical Scientific Management, Human Relations and Systems Theories, the other on philosophy of science categories, such as Rational, Naturalistic, Open and Non-Equilibrium Systems. Accounts converge as to who count as key scholars within phases.

In Classical Scientific Management these include Taylor, in Administrative Management, Fayol and in authorship of bureaucratic models, Weber. Representative scholars in Human Relations and Behavioural Science include Mayo, Barnard, Maslow and Herzberg, while Systems Theories are connoted by the work of Getzels and others. The field can be characterised as consisting, within any given period, of scholars sharing similar core ideas on administrative or organisational management constituting a relatively leading or dominating 'school' or paradigm, coexisting with others continuing to work in earlier traditions and competing with those prospecting new ones, more or less (in)complete borrowings and crossovers from time to time occurring.

3.4.1.1 Classical scientific management

Classical Scientific Management ideas, otherwise termed Rational System ideas by Hoy and Miskel (2001) and Scott (2003), dominated from the 1900s to 1930s, represented by successive schools of Scientific Management, Administrative Management and bureaucratic models. Analysis and synthesis of their core ideas is presented below from a number of sources (Hoy and Miskel, 2001; K. H. Huang, 1988; Lin, Wu, Zhang, Tang, Ting, Zhou and Cai, 2003; Lunenbury and Ornstein, 2000; M. Q. Qin, 1998; Scott, 2003; R. Z. Wang, 1998; Wang, Lin, Zhang, Huang and Yang, 1999; W. Q. Xie, 2004; Xie, Lin, Zhang and Zhang, 1995; Wu, Chen, Yang and Yan, 2001).

The representative *par excellence* of Scientific Management was F. W. Taylor (1856-1915) whose *The Principles of Scientific Management* in 1911 described the application of scientific methods to control of work methods and procedures through division of labour and standardization of procedures in the interests of efficiency. These were the responsibilities of managers who

controlled workers' efficiency by strict rules of practice. However, while 'time and motion' was helpful in strengthening organisations' productive efficiency, workers were often seen as robots, their human and psychological needs untended. The work of H. Fayol (1841-1925), a French scholar and the archetypal Administrative Manager, was also careless of workers' welfare and psychological needs. Coming from management level, his *General and Industrial Management* in 1916 emphasised the functions of administrative management process exercised through five functions: planning, organisation, command, coordination and control. Organisations could be effectively managed through an authority hierarchy which established a division of labour and clarified workers' duties through a unified system of direction pursuing consistent objectives. Personnel management was to emphasise stability of employment, employee self motivation and group morale. In turn, explication and analysis of the notion of bureaucracy is strongly identified with the work of German scholar M. Weber (1864-1920) who, in contrast to Taylor and Fayol's focus on analysis of practical problems concerning achievement of organisation objectives, focused his ideas on fundamental problems of the origins and structures of organisational bureaucracy. His historical research showed that adoption of formal rules, hierarchy and division of labour based on the twin principles of positional and expert authority, formal selection and career orientation to office and impersonality, including that with respect of record keeping (Bedeian, 1989; Hanson, 2003; M. Q. Qin, 1998; W. Q. Xie, 2004), though an increasing feature of rationality in modern social arrangements, was not new. It had long been a feature of government organisation structures and operating systems and had become widely adopted by many different kinds of organisations. He delineated, as with other elements of social structure, a model or 'ideal type' of bureaucratic functioning distilled from consideration of many forms but corresponding exactly to none

of them, as an aid to understanding and study. It represented the endeavour to pursue rational decisions that led to performance at greatest efficiency which Weber acknowledged as depending upon the clarity of known relations between organisational ends and means.

Putting aside the historic mistake of confusing Weber's use of the term 'ideal' with desirable when, indeed, one of his greatest fears was concerned with the over-rationalisation of social life, the 'iron cage' of organisational control, it is evident that, in simplistic terms, bureaucratic processes established on principles of impersonality and rational management systems tend to have both positive and negative aspects. While the central purpose of Weber's analysis is to reveal how bureaucratic forms seek to marry office with expertise, strict enforcement of formal rule and other control systems can lead to stasis and block creation. Clear system direction and division of labour may unify command and strengthen organisational efficiency but also restrict individual initiative and generate frustration. Organisational life is about crisis and contingency, as well as routine. Different types of organisation needs and subsequent research into bureaucratic forms by sociologists, such as Gouldner (1954), Burns and Stalker (1961) and Crozier (1964) demonstrated that different management structures and styles rather than one 'ideal' (in either sense of the term) management model may be best suited to particular contingencies, including changing markets and technologies. Moreover, overemphasis on strict institutional management, regarded as the pathology of bureaucratic forms, may generate conventionalism, perfunctory performance, shirking of responsibilities and unwillingness to create autonomously.

In an obvious historical sense, such perspectives form part of the bedrock of

how we inevitably think about organisations and their management. Their central management ideas converge on concepts, such as systematic planning, standardised and professionalised division of labour, bureaucratic, centralised, unified and rationalised performance efficiency and formal rules. The purpose of management tended to be seen as based on achievement of performance objectives that could bring most benefit to organisations. There was acknowledged, concomitant lack of consideration of employee welfare. The informal organisation and individual psychological needs were largely yet to be recognised and mapped, objectives focussing on organisational not individual purposes in terms of effective work designs and organisational management systems, reward and compensation arrangements tending to be seen in materialistic and piece rate terms, in contexts of employment stability rather than flexibility and job rotation. However, their emphasis on organisation efficiency achieved through effective management is still deep in the heart of acceptable perspectives in modern organisational management, though ideas as to the means of its achievement may have changed. PPM systems all exist in professional state bureaucracies where principals' performances require suitable management to assure efficiency within systematic structures of administration within which they are given job descriptions of greater or lesser clarity, set against standards of professional performance to be followed in their conduct. It tends to be taken for granted that principals' individual performance objectives should be integrated with those of their organisations and that their managers/advisers should possess professional ability and, like the former, be appointed through selection and training, capable of adjudicating, validating and rewarding publicly validated success in performance.

3.4.1.2 Human relations and behavioural science

As is often the case in alternation and competition between social science perspectives, the Human Relations and Behavioural Science (sometimes referred to simply as the Behavioural Science and conventionally regarded as dominating the period 1930-1960s) phase in organisational and administrative theorising may be seen as, in large measure, arising out of reaction to many of the theoretical and practical shortcomings of the one which preceded it. The 'Hawthorne experiment' is pictured as initiating Human Relation approaches which inspired change in administrative management thinking before Behavioural Science came to prevail in 1940s (R. S. Zhang, 1986). Both focused research on human interaction and behaviours using methods which some scholars termed naturalistic system organisational perspectives (Hoy and Miskel, 2001; Scott, 2003), distinguishing five representative theories: Human Relations; Dynamic Equilibrium Theory; McGregor's XY Theory; Maslow's Hierarchy of Need Theory; and Herzberg's Two Factor Theory. As the last two have already been discussed in Sections 3.2.4.1, we will focus here on the other three and then prospect their implication for PPM.

The initial heyday of Human Relations approaches is conventionally placed between 1924 and 1932. A series of research experiments at the Hawthorne Plant of Chicago's Western Electric Company in America were carried out by Elton Mayo and his associates. They originally followed classical scientific management hypotheses concerning lighting and other workplace improvements and their effect on employee productivity. However, results were claimed to show (though subsequently substantially refuted by Carey's (1967) reanalysis of the Roethlisberger and Dickson (1939) data) that work environment and other physical factors did not determine productivity as

much as social and psychological factors, particularly informal organisational influences which, in some respects, were regarded as even greater than the norms and demands of formal organisations themselves, including the effectiveness of their administrative management systems, improvement of their work environment, or the material rewards emphasised by classical, scientific management ideology. It appeared that effective organisations should satisfy employees' self esteem and pride in order to encourage their work motivation and strengthen members' consciousness of teamwork to increase work performance, allowing them to participate and present their opinions, thereby increasing psychological satisfaction. The fact that, in retrospect, much of Hawthorne's evidence and analysis was deeply flawed mattered little to the vogue which 'human relations' enjoyed.

C. I. Barnard (1886-1961), a key figure in the Dynamic Equilibrium theorising that followed, as the director at the Bell Telephone Company, attempted to integrate scientific management's emphasis on organisational objectives with human relation emphases on personal needs and satisfaction, arguing that a balance between organisational expectations and personal needs led organisation performance to be increased. Organisations were cooperative systems formed by individual members' inputs requiring them to establish objectives through communication if objectives were to be effectively progressed (Scott, 2003). Barnard saw such systems as capable of having similar objectives in cooperation with each other. Such organisations within systems could effectively promote overall performance and satisfy members' needs by clarifying definite objectives, strengthening interactions and communication, seeking members' identification and cooperation and stimulation of their willingness and effort, taking advantage of informal organisational realities.

In somewhat the same vein, XY Theory was put forward by MIT professor, D. McGregor (1906-1964) in his *Human Side of Enterprise* (1960) which viewed effective management as capable of arousing 'good human nature' to make members work for the organisation. He argued that managers held two different types of hypothesis on human nature, creating two different management styles, calling that which he saw originating from classical scientific management as X Theory and his own as Y Theory. X theory hypothesised bad human nature, employees being seen as passive and selfish, necessitating organisations taking authoritarian management approaches. McGregor suspected that X Theory's hypothesis on human nature inverted cause and effect, bad management being the main reason why workers detested their jobs or were unwilling to take responsibility. Therefore, he predicated his basic hypothesis on good human nature; employees were active and possessed potential, so long as managers provided suitable work environments and encouragement, such that the former could put their hearts in their work to achieve organisation and individual objectives. He argued that managers should adopt democratic leadership, integrate organisation and individual objectives, employing decentralisation and empowerment, work expansion, participatory management, self appraisal, and so on, to allow employees' potential to fully emerge.

In their variant ways, such perspectives threw doubt on the utility of strict supervision and management in achieving organisation objectives, prioritising instead respect for employees, strengthened teamwork and awareness of and support for informal organisation in combining satisfaction of members' psychological needs and increased work performance. Dynamic equilibrium

theory emphasised working in this way to achieve integration of individual and organisation objectives through good communication in order to earn employees' recognition and cooperation in terms of specified common objectives. McGregor's XY theory took such approaches in the direction of democracy, decentralisation, participation management and self motivation to stimulate members' potential, while Maslow's hierarchy of needs theory (see Section 3.2.4.1.1) emphasised that people have ambition for self-realisation and Herzberg's motivation-hygiene theory (see Section 3.2.4.1.3) emphasised that if managers can provide employees with feelings of achievement, recognition, responsibility, variety and challenge in their work they could increase their satisfaction and work ambition. Together, they reoriented management focus from organisation toward psychological levels, sometimes even at risk of overemphasis on analysis of individual behaviour in organisations and neglect of the influence of external environments on both. It might reasonably be argued that satisfying personal needs at cost of denial of organisational structural realities and management functions can lead to loose organisation structure, even impotence. Once more, the possible implications for PPM systems tumble out.

3.4.1.3 General systems theories

Though having their origin in fields, such as biology and engineering in the 1920's, the concepts of General Systems theory were not applied to analyses of organisations until the 1960s (J. H. Lin, 2001), then remaining in vogue until the 1990s. Based on the idea of 'positive-negative-integration', in contrast to scientific management's emphasis on effective management structures running from top to bottom and the 'corrections' of Human Relations and Behavioural Science, whose focus on internal structure and organisational

members neglected the reality that organisations exist in interactive relationship with their external environments, General Systems theory was launched to integrate both sides. Recognising that social environments became more rather than less complicated, changing at such pace that they required organisations to recognise their importance, seemed to point to the usefulness of conceiving of them as open systems. As open systems organisations were seen as composed of interdependent subsystems interacting with their outside super-system, seeking control of as many interrelated factors or influences as they might effectively manage. Among the major manifestations of Systems Theories were Social System Theory and Contingency Theory, some exemplars of the latter, including Management by Objectives and Z Theory, being not so much system theories as attempts to integrate classical scientific management and human relation schools.

Getzels, Lipham and Campbell's (1968). *Educational Administration as a Social Process* adumbrated Social Systems Theory, using the concept of an open system to explain social behaviour in an administrative organisation where individual behaviour was affected along two interactive dimensions, institutional and individual. Institutions were composed of many roles, each carrying expectations, role and expectation making up the normative dimension in organisations that constrained individual behaviour toward achieving their objectives. When individual behaviours were matched with organisations' expectations they were deemed 'effective'. On the individual dimension, individuals possessed personality reflecting individual needs, forming the idiographic dimension in organisations where behaviour was oriented to satisfying individual objectives. When individual behaviour fulfilled personal needs it was, in turn, also deemed 'efficient'. When organisation objectives or role expectations matched individual objectives or need

tendencies, personal satisfaction would be at its highest. If not, individuals faced role-personality conflict capable of affecting organisation effectiveness and efficiency. Getzels et al. (1968) believed that organisations were not closed and independent but existed in an open social system, affected by interactions with their external environments. The cultural environments in which people lived formed much of their ethos, reflecting certain social values. Culture and social values in the environment influenced roles and expectations within organisations, along with individual personalities and need tendencies. Understanding social behaviour in organisations required process analysis of interactions along individual, institution, and cultural dimensions.

Contingency Theory has been identified most strongly with the work of Fiedler (1967) who conceived organisations as formed by many subsystems, existing in a relationship of interdependence and openness, interacting with their environments, developing different kinds of 'situations' which required different leadership in order to be most effective. Leadership style, determined by the motivational system was of two types: task-oriented and relationship-oriented. Situations were determined by three factors, leader-member relationship, task structure and positional power, which combined into eight different modes ordered in terms of leader control, from high to low, the first three high-control, the last two low-control, the others moderate-control situations. Fiedler argued that organisational effectiveness was contingent on leaders' style and control of situation. In those of high and low control, task-oriented leaders were more effective, whereas in situations of moderate control, relationship-oriented leaders were more effective. Although his measurement and definition of leadership style has been subject to much criticism, Fiedler's contingency theory has been successfully used to

predict leadership effectiveness of principals in school contexts (Hoy and Miskel, 2001) with its emphases on continuity rather than polarisation, opposition to the concept of absolute organisation and leadership style, insistence on flexibility, belief that different levels of organisation should adapt different methods of management and motivation, opposition to 'one best way' models of achieving objectives, with emphasis on equifinality and belief in the responsibility of managers becoming more complicated and technical and the utility of the application of 'If...then' models to explanation (R. S. Zhang, 1986).

Management by Objectives (MBO) was devised by P. F. Drucker (1954) in *The Practice of Management*, contending that under traditional, bureaucratic models of management employees would passively follow rules and commands, unclear of their work objectives and direction, leading to lack of pride and responsibility, causing decrease in work motivation and management flexibility and activity. He argued that organisation performance could be promoted through specifying objectives of teamwork and individual control processes. Management methods should respect employees, allowing opportunity to set objectives and develop self-control. While jointly set, the achievement of organisation objectives was to be established above the attainment of individual objectives. Processes of interaction and communication between managers and employees were to be privileged in an ethos of reward rather than punishment and democratic rather than totalitarian leadership. In such a fashion, MBO was depicted as a systematic management process which encompassed setting objectives, implementation, self-review and feedback, performance appraisal, discussion and improvement, using objectives as the centrepiece of humanised organisation management (Carroll and Tosi, 1973; Xie, 2004). However, while MBO was

predicated on the basis of a belief in the goodness of human nature, it may be in danger of being rendered formulaic and ineffective either if employees lack dynamism, spontaneity and ability to manage themselves or when managers lack trust in them.

Z Theory has been most strongly associated with the American-Japanese, W.G. Ouchi (1981) who, in *Theory Z: How American business can meet the Japanese Challenge*, sought to fuse Japanese and American enterprise culture during his service in UCLA. He also argued for participation in decision making as the means of increasing members' recognition of organisation objectives, establishing interactive, equal, trusting relations between members, sharing beliefs and values on team work, laying emphasis on symbolic leadership rather than class control, employee self-management, loyalty and work ambition, establishment of intimate, interpersonal cultures through work groups and cooperative relationships. Undoubtedly attempting to integrate opposing schools of classical scientific management and human relation approaches, Ouchi juxtaposed issues of establishment and recognition of individual and organisation objectives with emphasis on ideas of equality, trust, team work, shared commitment, cooperation, interpersonal relation and self-management in pursuit of increased employee effort toward achieving organisational objectives, while also maintaining concern for the satisfaction of both materialistic and psychological rewards and interaction between organisations and the environment.

It is fair to represent each of these 'systems' approaches as attempts to engorge and transcend classical scientific management and human relations management theories. Through processes of setting objectives and participant management, MBO and Z theory have sought to integrate

organisation and individual priorities, strengthening employees' sense of responsibility and obligation through management with a human face and emphasising teamwork and cooperation. All these theories can be seen to be concerned with the individual, internal institutional and external cultural dimensions of organisations, emphasising integration of organisation and individual and establishment of consensus objectives through communication. The management method they portray lays emphasise on equality, cooperation and trust, participant management, flexibility and awareness of contingency. Employees are encouraged to establish work teams, share commitment and self-manage in pursuit of rewards and punishments balanced between the materialistic and psychological. It would be true, but possibly trivial, to say that, having opened Pandora's Box of contingencies, such approaches find techniques for dealing with controlling and predicting them is harder than simply recognising their importance. For PPM systems, among the distinctive 'messages' of such approaches, is surely the constant need for effective adjustment and flexibility in face of external environment. They highlight the issue of whether and how far schools and individuals should be regarded as possessing uniqueness, such that performance objectives and standards should be adjusted accordingly. We do well to recognise that there is a deep rootedness to the belief that 'all schools are different' that ought to be treated with empirical delicacy, not ideological absolutism.

3.4.2 Recent trends in administrative and management theory

With increasing global competition in fast changing external environments the search for understanding the means of engendering high quality organisational performance has dominated development of administrative

management theory, most post-System approaches being aimed at promoting effective performance objectives, including Total Quality Management, Human Resource Management and New Public Management which are all of relevance to PPM.

3.4.2.1 Total quality management (TQM)

In the argot of TQM, 'quality' is the foundation that determines whether an organisation is capable of sustainable development, rendering it necessary for it to achieve effective processes of 'total' quality management. Total Quality Management was initiated in 1985 by an American Navy psychologist, N. Warren, ex-Company-Wide Quality Control (CWQC) which had been carried out in Japanese business as a new model of quality improvement. Subsequently, many well known scholars, such as A. V. Feigenbaum, J. M. Juran, K. Ishikawa, P. B. Crosby, W. A. Shewart and W. E. Deming conducted studies of TQM, ensuring that it became an important new management concept, since 1990 even gaining purchase in education institutions (Lin et. al., 2003). Total Quality Management has to go through processes of Quality Control (QC), and Quality Assurance (QA). QC concerns processes after the event, its purpose to locate and eliminate defective products. QA is mainly concerned with prevention and process improvement before the event, aiming to achieve the objective of zero defects. TQM is predicated upon everyone being involved with processes of quality improvement and customer satisfaction; quality objectives move through emphasis on products, production processes and technological improvement toward caring for customers. The key stages of the evolution of the characteristics of such processes over the past eight decades, from mere quality control to TQM, are shown in Table 3.5 (Z. K. Huang, 1999).

Table 3.5 The process and characteristics of TQM development

| Items evolution | Quality Model | Methods | Positive | Negative |
|--|---------------------------------------|--|--|---|
| Quality Control 1924-1939 | Quality is the product; No changes | Post-examination Statistic analysis | Statistic control | Post examination, Defect elimination causing cost increase Lack improvement to increase quality |
| Quality Assurance 1940-1979 | Quality is to meet standards | Pre-examination, Process improvement | Highlight the process | Standards are fixed so that quality can't continue improvement |
| Total Quality Management 1980-present | Quality is to meet customer's need | Empowerment, Organisational learning, Analysis of customer needs | Include the advantages of the first two phase; Continual improvement Pay attention to customer's needs | Might pay too much attention to external customers but neglects internal customers |

Source: Huang, C. K. (1999). *The feasibility of implementing TQM in the classroom management of elementary schools* (p.15). Unpublished master dissertation. National PingTung University: PingTung.

It is evident that the core idea of TQM is satisfaction of customers' expectations, 'quality' meaning reaching standards set by level of customer satisfaction and 'total' implying that all units and members should participate, all processes of operation controlled, and all aspects of production considered. 'Management' connotes effective methods and processes for achieving high quality. The model is essentially systemic, where customer satisfaction is regarded as the best assurance of quality and the quality of manpower and human resource development in organisations, including management upon whose control, supervisory and feedback systems effective monitoring of the external environment *qua* customers' needs takes place, is crucial. Teamwork is regarded as more efficient than working alone, with 'reality management'

using practical situations to collect and control reliable information and indulge in prospective planning before events, taking place to more actively control customer needs. (Greenwood and Gaunt, 1994; Lin et al., 2003; Sallis, 1993; W. Q. Xie, 2004)

While there are obvious difficulties about defining either children (or their parents) in receipt of compulsory, state education, in particular and 'clients' in receipt of professional services, in general, as 'customers', the attraction of attempting versions of TQM in schools has been evident in an ethos where state sponsorship of 'quality assurance' has served as an ally of simultaneously encouraging local management and finance and continuing central control and surveillance. Who can be against consensus and quality? But by whom are practices aimed at achieving them designed and monitored and for what ultimate purposes?

3.4.2.2 Human resource management

Human Resource Management (HRM) aims at employing effective methods in planning, selection, supervision, appraisal and development of manpower in organisations in order to increase achievement of objectives. HRM has flourished since the 1980s as its predecessor, personnel management, was regarded as being inclined to passivity. HRM claims to value the importance of human resource to organisational strategic development, to be engendered by active management with respect of development of and cooperation with the labour force within organisations. In achieving such a shift, the status of HRM within organisations has tended to become more important and respected, sanctified by belief in the importance of knowledge in globally competitive contexts (Bratton and Gold, 1999; Middlewood and Lumby, 1998;

Wu and Lin, 1997). Under classical scientific management, organisations treated employees as production instruments, personnel management mainly focusing on selection of manpower rather than training in contexts of relatively rigid division of labour, bureaucratic management and employment stability, to the neglect of strategic manpower planning and career development, with emphasis on materialistic rewards rather than psychological satisfaction. As human relations and behavioural science priorities gained dominance, personnel management focused more on promotion of work motivation, satisfaction of psychological needs and interpersonal communication but still neglected labour force planning and development, consciousness of whose importance rose with the fortunes of systems theories that prompted organisations to pay greater attention to outside environment influences, leading by the 1980s to human resources becoming regarded as organisations' most strategic resource (W. L. Zhang, 1999).

Middlewood and Lumby (1998) characterised human resource management as highlighting the importance of process but not standardised procedures, active planning but not passive reaction and negotiation as the means of solving latent conflicts. Guest (1987) juxtaposed personnel management and HRM concepts (see Table 3.6), contending that HRM could provide organisations with more flexible management than traditional PM, offering more integrative, long-term, strategic, dynamic, autonomous and beneficial role interpretations, *alter* to an *ego* which stressed quality and performance. Just as any organisation needs high quality manpower to assist in achieving objectives, effective human resources development, usage and management become integral to its selection, maintenance, appraisal, and training. (Lunenbury and Ornstein, 2000; Smith, 2001; Webb and Norton, 1999). The purpose of human resource planning is to formulate a long-term strategic and

short-term operation planning in terms of internal or external environment needs of the organisation with recruitment aimed at acquiring plenty of high quality manpower (H. C. Zhang, 2000; Q. R. Lin, 1998). As organisations increasingly stress the importance of accountability, the concept of performance management becomes more important and traditional, personnel management, annual performance appraisal methods, oriented predominantly to employee reward and discipline are rendered inadequate. New concepts of performance management that consider it to be a strategic and integrated process of facilitating organisations' sustainable development (Amstrong, 2004) where systematic models of cyclic feedback are used to prioritise future, shared objectives and encompass personal professional development objectives, are privileged. While the ultimate purpose of HRM is to ensure that employees can effectively achieve organisation objectives, performance management's purpose is to assist employees in achieving them. Given the centrality of principals as school human resources, such HRM aspirations are of some potential relevance.

Table 3.6 Characteristics of HRM and personnel management

| Type Comparison | HRM | Personnel management |
|-----------------------------|--|--|
| Time period | Long term, self motivated, aggressive, strategic, integrated | Short term, reaction, unique, on the edge |
| Emotional Obligation | commitment | ObeY |
| System Control | Self control | External Control |
| Relationship with employees | Mono, individual, high trust | Poly, groups, low trust |
| Preferred Structure | Organic, division of power, flexible role | Bureaucratic model, mechanic, authoritative, standard role |
| Role | Integrated to a larger direct management system | professionals |
| Appraisal standard | Biggest benefit | Lowest cost |

Source: Guest, D. E. (1987). Human resource management and industrial relations. *Journal of Management Studies*, 245, p. 507.

3.4.2.3 New public management theory

NPM has flourished since the end of 1970s, becoming a trend in the 1980s, deeply influencing bureaucratic administration revolutions in England, America, New Zealand, Australia and other western (ised) societies. In England and New Zealand, in particular, there has been almost continual revolution in local and national government administration, including that of schools (Box, Marshall, Reed and Reed, 2001; Eggers, 1997; Kickert, 1997; Z. Y. Zhan, 1999). Although different countries have developed different emphases on targets and methods they share many similar NPM characteristics, for example, attempted modification of bureaucratic models, reinforcement of empowerment and accountability, introduction of market mechanisms, privatisation of public services, clarification of performance objectives, implementation of performance management, adoption of quality improvement systems that focus on 'the customer', abolition of lifelong, ensured employment policies in favour of contract and performance related pay systems, cost cutting and progress with organisation reengineering (Armstrong, 1998; Pollitt, 1993). The rise of NPM has been directly connected to factors, such as putative economic failure and official belief in administrative ineffectiveness and dissatisfaction with public services. Faced with pressures of market competition, private sector organisations tend to direct management towards performance objectives and quality, having in general long been rid of traditional scientific management in favour of 'customer service', flexibility, empowerment, accountability, efficiency and contracting out as management methods. Public sector organisations, their structures and statutes held to traditional, bureaucratic processes were, in the changing political climate of the 1970s and onward, certainly in Britain, deemed ineffective, lack of competition leaving them in the grip of producer

interest or 'capture', lacking competition and ineffectively managed. Increasing trends to globalisation have led governments generally to prioritise policies aimed at raising competitiveness through adapting private sector management methods oriented, in the argot, to the 4Es: effectiveness, efficiency, excellence and equity in pursuit of improved service quality and achievement of performance objectives (Dale, 1997).

NPM is based on ideas of private sector management and marketing (Hood, 1991; Pollitt and Bouckaert, 2000) mediated by public choice, principal-agent, and transaction cost theories (Z. L. Chen, 1999; J. X. Hong, 2003; Kaboolian, 1998; Walsh, 1995). Public choice refers to the rational pursuit of maximised economic benefits based on group or non-market government decisions. All public service bureaucracies where payment for service is at the point of delivery have tended to operate on a calculus of non-market choice, employing administrative rules of allocation. Traditional Keynesian economic theory contends that government should be actively involved with markets, taking actions requisite to stimulating economic development. However, since public provision lacks competition in many areas of public provision, not surprising, given that much of its origin has been in areas of natural monopoly and state interest, for which there is, at the same time, increasing demand for and heightened expectation of service, across social classes, there is constant threat of budgetary expansion and middle/service class revolt. NPM, based on the notion of rational economic man, hypothesising that individuals have selfish motives and will seek maximised benefits, has considerable appeal, particularly to dominant groups best placed to 'choose'. Marketisation, contracting out and other forms of ameliorating government expansion of production while enabling its supervisory role to be reformed as regulation have enjoyed increasing appeal, combined with that of principal-agent theory,

as applied to the public sector, used to explain the difference of selfish objectives between stockholders (principals) and managers (agents), to resolve difficult allocatory tensions (Jensen and Meekling, 1976; Ross, 1973). Principals and the agents can be regarded as disconnected policy makers and executors in organisations. Because humans are rational, self-interested actors, principals wish to share risks with agents but, like them, agents are self-interested and may not put forth all possible effort, hide information or act irresponsibly. This state of affairs necessitates contracts that state clearly the rights and obligations for both parties, emphasising achievement of performance objectives and appropriate incentive structures. Such are not restricted to private enterprise but are increasingly features of public contexts; principal-agent relations can be said to exist between a general public (principal) and its government (agent), mayors (principals) and administrators (agents); governing bodies (principals) and school principals (agents), and so forth, between which a charter or contract constitutes and clarifies the basis of their rights and obligations.

The notion of transaction costs, first used by R. H. Coase in 1930 and later further developed by Williamson (1975, 1985), also underpins NPM. Traditionally, production cost, concerned with core, 'making' activities generally determined by technology and associated 'know how', was regarded as important, to the relative neglect of transaction costs within economic systems. The latter included information acquirement, pricing, negotiation, contract, execution, supervision, and so forth. Many transaction costs may be in relation to complex activities quite different to those of organisations' 'cores', entailing quite different orders of expertise. Some may be usefully contracted out in public or private sector organisations, increasing competition, decreasing administration costs and increasing effectiveness.

Ideologically driven government policy may even fetishise such practices, claiming inherent forms of superiority for the capabilities of contracting out and 'enterprise'.

Under NPM accountability has become an important political goal, not least in public services like education. Timperley (1998) believed that educational accountability has not merely an educational purpose but a political function; one of the reasons is to provide rationale for elimination of unsuitable practitioners (Bollington, Hopkin and West, 1990; Fidler, 1991; Killen, 1991). Accountability has assumed key significance in the educational management philosophy of the American, British and New Zealand New Right (Apple, 1982; Codd, 1990; Pollitt, 1988). On its one side, neo-liberals have advocated free market competition to increase performance and quality while, on the other, new-conservatives claimed the need to return to high standards of discipline and traditional curricular and pedagogic forms (Leithwood, Jantzi and Steinbach, 2002). No matter what the origin of the impulse, authority over personnel management has been very largely decentralised to schools and personnel problems in their entirety have become part of school leaders' range of accountable performance (Malen, Ogawa and Kranz, 1990; Marrett, 1990; Wissler and Ortiz, 1986). When school budget and other management powers are also decentralised to schools they shoulder almost entire responsibility for ensuring educational quality. In this sense, for example, Taiwan's education administrative management system moved into a period of decentralisation in 1999 after enactment of the Local Government Law and Educational Foundational Act (Cheng, 2004a). Central government is slowly releasing some decision making powers to local education bureaux and schools, while remaining politically policy dominant. While parents remain the main principals, central and local government agencies, local education

bureaus and schools all serve in different respect as both principals and agents and, as the latter, have responsibility for effecting education policies which encompass appropriate performance management systems.

3.4.3 Summary

PPM systems' planning and practice is thoroughly suffused by administrative management notions in ways that draw complexly on a variety of attributes of many theoretical positions, from classical scientific management and bureaucratic models, to emphasis on social and psychological satisfaction of human relations and behavioural science phases and the putative 'integration' of systems theories seeking to combine organisation objectives and individual needs in open systems of interactions with external environments. Twenty first century focus on globalisation and knowledge economies privilege management theories emphasising concepts of contingency and flexibility, so that 'movements', such as TQM, HRM, and NPM have all had considerable influence on public services in times of post-Welfare State fiscal crisis. Emphasis on achieving quality and performance objectives have tended to become the ultimate purposes of decentralised management as NPM and New Right management ideologies, adopted across the political spectrum in most westernised democracies, become their ruling ideas. School principals in this era of performance, quality, and accountability stand in need of support and assistance as leaders and managers in the acquisition of appropriate professional capability for achieving expected performance objectives in changing external, including policy, environments. A measure of a worthwhile PPM system could be taken to be its ability to do so while also imparting insight or enlightenment to those involved in it as to the complex social science and ideological rationales for current policy and practice. Indeed, it is

now to recent and current policy and practice which we now turn, in the next chapter outlining and discussing relevant events in the United Kingdom, New Zealand and Taiwan.

Chapter Four

PPM Policy in the UK, New Zealand and Taiwan

4.1 Introduction

One of the most cherished beliefs concerning schooling, particularly among latter-day policy makers, is that head teachers or principals are key figures in promoting teacher performance and school effectiveness (see Section 1.1.1) notwithstanding that the position, in a conventional sense, may not exist in some school systems, such as Switzerland or Greece and is constructed in many ways in those where it does (Kavouri, 1996). Moreover, such belief tends to exist much more conditionally among teachers, parents and students, the direct consumers of their ministrations in different cultural contexts than they appear to do among principals and politicians (Dimmock and Walker, 2005; Middlewood and Cardno, 2001). However, in recent decades, strengthening principal personnel as a means of improving school quality has become a core, sometimes even relatively unthinking, putative strategy of improving international competitiveness for many governments and a variety of PPM systems have been embraced in their pursuit (Middlewood, 2002). Britain and New Zealand have adopted relatively complete national policies while in the USA diverse systems coexist among states and school districts. Taiwan adopted the concept of performance appraisal for principals in 1999. The focus of this chapter is mainly on the well-established national systems of the UK (England and Wales) and New Zealand as a relevant point of comparison for the planning and implementation problems encountered in Taiwan

4.2 PPM Policy in the UK

The Education Act, 1986, delivered by one of a series of Conservative governments, introduced head teacher appraisal in 1991 which mainly stressed developmental purposes (DfES, 1991; Gunter, 2001). The first of a series of New Labour governments, beginning in 1997, continued emphasis, as with much else within Conservative educational policies, on leadership and management of principals as integral to improvement of education quality (DfEE, 1997, 1998a). A new PPM policy was launched in September 2000 combining developmental and accountability purposes, though the latter had not been emphasised in the 1991 arrangements (Gunter, 2001; Spear, 1997; TTA and Ofsted, 1996). The changed purposes of the new PPM policy have led to diverse operational processes and related supplementary schemes involving both governing body (GB) and external adviser (EA), impinging upon pay structure and policy and professional development systems.

4.2.1 Development background of PPM policy processes

Since 1997 British governments have claimed to make education reform a policy priority and it is certainly the case that central intervention to determining all aspects of school affairs, including curriculum, pedagogy, assessment (Tomlinson, 2005) and governance has reached unprecedented levels, given the belief that education policy change can 'make a difference' and have calculable electoral consequences. Regarding head teachers' professional leadership and performance as core to improving school education quality and raising pupil achievement, Estelle Morris, Minister of the Department for Education and Skills (DfES) said:

'Strong school leadership is essential to the success of all our schools. Good head teachers hold the key to unlocking the potential of pupils, all school staff and the school community. It is vital that those aspiring to headship receive high quality, professional training, development and support to prepare them for their leadership role.' (DfES, 2002: 1)

The Green Paper *Teachers: meeting the challenge of change* (DfEE, 1998a) had put forward a series of programmes to establish a qualification system, the National Professional Qualification for Headship (NPQH), which started in 1997 and became mandatory in 2003, requiring all those newly appointed to achieve professional certificates or NPQH training by 2009 and existing head teachers in England by 2013 (DfES, 2004a). Professional training was intensified, including a Headteacher Induction Programme (HIP) for new principals and a Leadership Programme for Serving Headteachers (LPSH) in post for more than three years. A National College for School Leadership (NCSL, 2003) was established, regarded as constituting the most important reform stage and milestone on the development of head teacher leadership and management policy in more than 40 years (Bolam, 2004; Bush, 2004), whose influence was expected expand to the rest of the world (Crow, 2004; Earley and Evans, 2004; Southworth, 2004; Walker and Dimmock, 2004). Concomitantly, National Standards for Headteachers (NSH) of primary and secondary schools (DfEE, 1998b) aimed to clarify the requirements of their professional leadership and management capabilities and to serve as a reference in their preparation, in-service training, professional development and performance management, were promulgated and modified in 2004 in the light of ongoing reform and the changes in role of head teacher roles (DfES, 2004b). Their operation has become integral to implementation of new PPM policy since 2000.

PPM policy in Britain has, then, developed gradually since the inception of head teacher appraisal in 1991 and may be tracked across movements toward accountability, school self-evaluation, school improvement and intensifying school management and training of head teachers (Hewton and West, 1992), all invariably tagged with the purpose of raising pupils' achievement since the 1980s. The principles and contents of three reports lay behind the concrete policy planning that has ensued. The first was the Advisory Conciliation and Arbitration Service Report (ACAS, 1986) aimed at assuaging conflicts between government, teachers and their professional associations, to be set against their effective expulsion by Thatcher's first government from collective bargaining and all forms of formal consultation; the second, the National Steering Group (NSG) Report (Department of Education Science, DES, 1989), preceded by two years of pilot study. These directly influenced the policy planning of principal appraisal in 1991 while the third, a Teacher Training Agency (TTA, now renamed the Training and Development Agency for Schools, TDA) and Office for Standards in Education (Ofsted) Report (TTA and Ofsted, 1996), following their review of teacher and principal appraisal policy after 1991, influenced the direction of new principal performance management policy in 2000 (Gunter, 2001; 2002). In retrospect we can see policy as having developed in five stages.

The first, before 1986, may be termed the policy advocacy and negotiation stage, one of preparation and pilot study. Bolam (1990: 4) pointed out that the idea of appraisal as an innovation was debated in the professional and political arenas before 1986 when two events greatly influenced future direction: the Education Act, 1986 which empowered the minister of education to ask local education authorities (LEAs) to appraise teachers and headteachers; and the agreement reached between the six teacher unions

and the LEA employers, under the auspices of ACAS in the summer of 1986, to conduct a national pilot scheme on teacher and heads appraisal aiming at improving their professional capabilities and performance. Pilot studies followed 1987-1989 in six LEAs, conducted by the NSG, in accordance with the ACAS report, to design a set of suitable appraisal procedures and programs as reference points for further policy planning of head and teacher appraisal systems for LEAs. The NSG report (DES, 1989) became the main reference for LEA schemes. Policy formulation and implementation stages followed in the period 1990-1995, the British government having decided to formally implement national head and teacher appraisal policy based on the 1986 Education Act and the NSG report, publishing in *The Education (School Teacher Appraisal) Regulations 1991* (DES, 1991a) and *School Teacher Appraisal Circular (No. 12/91)* (DES, 1991b). Heads were divided into two halves to receive LEA appraisal of two-year cycle from September 1992. All headteachers should have undertaken their first appraisal by August 1995 (Hart, 1997; Hellawell, 1997). This policy was reviewed and modified in 1996-1999, chiefly in response to the TTA and Ofsted (1996) report and academic investigation (Barber, Evans and Johnson, 1995). The former argued that appraisal processes were not strict enough, over-emphasising personal development which was helpless to promote better pupil achievement, requiring a change of model, duly incorporated in the incoming Labour government's Green Paper (DfEE, 1998a), leading to a new performance management system for heads, inaugurated in September 2000 which included a performance related pay system. The fifth and final stage of implementing PPM policy accorded annual responsibility for it to school governing bodies. The amended regulations were published in September 2001 for England (DfES, 2001a) and 2002 for Wales (National Assembly for Wales, 2002). The latest regulation (England) was revised in October 2006

(DfES, 2006d) and the first performance management plan will be completed by end of 2007 for headteachers in England. The role of external advisers managed by Cambridge Education Association (CEA, now is renamed as Cambridge Education, CE) will be replaced by School Improvement Partners (SIP) commissioned and managed by LEAs, having been recruited, trained and accredited by the National College for School Leadership (NCSL). According to the regulations, all schools in England would be allocated a SIP by the end of April 2008 (2006c). This new relationship of SIPs with schools is further detailed in the next section. The revised regulation still refers to external advisers playing the same key roles on supporting governors in the conduct of PPM. The SIP allocated to a school by its LEA will provide advice to governors about identifying priorities, improvement planning and target settings.

4.2.2 Policy contents and practice

PPM was defined as a system of annual performance review based on shared commitment that involved professional dialogue about aims and achievements between head teachers and governors in order to support continuous improvement of the leadership and performance of the former and recognise their putative influence on raising pupil standards (DfEE, 2000a; DfES, 2001b; Welsh Assembly Government, 2002). This constituted a shift in policy from individual appraisal based on data collection and judgment, to planned performance objective setting, professional dialogue and review processes anticipating sustained improvement. The promotion of school quality was regarded as the common mission of heads and their governing bodies, a strategic lever in helping governing bodies to achieve objectives of improving pupils' performance effectively (DfES, 2003b), part of the attempted

creation of school cultures with high expectations. (DfEE, 2000a; DfES, 2001b, 2003a).

Given its endowment with such importance, official intention for national PPM policy in Britain pointed to need for proper planning and design before implementation by governing bodies, appointed governors (AG) and external advisers and the setting of objectives. Explicit regulation by central government (DfEE, 2000b; DfES, 2001a) for schools to follow was accompanied by policy guidance (DfEE, 2000a; DfES, 2001b) and reference workbooks (DfES, 2003a; 2003b) for heads, governing bodies and others. During the planning process, government also paid much attention to consultation of different parties. Accessory programmes needed by its implementation (such as a performance related pay system, external advisers, etc) were planned and prepared, along with clear regulation of purposes, objects, persons in charge, responsibility and roles, operational processes and methods for handling performance outcomes and due process. It was hoped that schools would be able to follow the requirements of PPM policy swiftly and with unambiguous ease. It's main objectives were to simultaneously address both accountability and development (DfEE, 2000a; DfES, 2003b) while helping governing bodies to: shape their visions and directions for their schools; ensure that they effectively fulfil their statutory duties; direct resources appropriately towards them; understand the strengths and weaknesses of their schools as the basis for sustainable improvement; and help principals to recognise their professional development requirements, promote sustainable development, support and challenge school senior management teams, while focusing on implementation of school development plans. Such processes were expected to provide a fair and transparent basis for performance appraisal and award and now occur annually on a structured basis, TTA and Ofsted (1996) arguing that a two year cycle was too

long and management activity for improving schools' conditions not clear enough. Hellawell and Hancock (1997) found that safety first was the most common strategy adopted by heads under the 1991 arrangements for their first cycle, choosing objectives at which they were good as 'soft appraisal' targets (Cullen, 1997). Under the 1991 head teacher appraisal policy two persons were in charge of the process, one from the LEA, the other an experienced head, both appointed by the LEA chief. From 2000 school governors became responsible, supported by a trained external adviser, for appraisal. Governing bodies chose two or three of themselves who were not school teachers or staff as appointed governors who selected and booked one qualified, external adviser from manpower pools established by Cambridge Education Association and maintained by the Secretary of State to assist them with their heads' performance reviews. External advisers could not serve in a particular school for more than three annual cycles (DfES, 2003b). One or more governors who had not participated in appraisal might be appointed as review officer(s) instead of the chairman of the governing body when dealing with complaint or disputation

The model of school management adopted in Britain can be described as parental domination with balanced control (Leithwood and Menzies, 1998), at least 1/3 of governors elected or appointed being parents, at least two but no more than one in three staff, including the head teacher, with LEA and community governors appointed by the governing body itself contributing at least one in five, respectively. Heads as staff governors may decide not to serve (DfES, 2006a).

Appointed governors were, then, made accountable for the appraisal of principal performance upon which salary level decisions depended, with the support of an external adviser and usually after training. Although there are no

mandated qualifications for them it is suggested that they should have good knowledge of the school, listening and questioning skills, ability to work in a team, collecting data and conducting its analysis, empathy and trustfulness, previous experience of appraisal reviews and justice, understanding of management process, the work of heads and PPM policy, have good interpersonal communications skills and enough time to execute the tasks (Welsh Assembly Government, 2002; DfES, 2003b). Having selected an external adviser they must agree targets and objectives with their heads, having reviewed and confirmed their overall performance and set objectives and professional development requirements for the coming year. They were to report to the chair of governors and the head, making recommendations on pay level for the coming year.

An external adviser was defined as:

'an accredited expert who must advise and support the governing body on reviewing the head's performance. Every school is entitled to an adviser for the equivalent of a day during the review cycle.' (DfES, 2003b: 11)

The British government contracted out recruitment, deployment and management of external advisers to the CEA, while their training and accreditation is undertaken by the Council for British Teachers (CBT) in 2000 (CEA, 2005; Crawford and Earley, 2004). Their qualifications and desirable qualities may be inferred from their intended roles (DfES, 2003a; 2003b; Welsh Assembly Government, 2002) as entailing good communication, interpersonal, data collection, analysis and judgmental skills, a background in leadership, management and HRM, familiarity with schools, PPM policy and pay system operation and credible personality trait. Having been selected from the website provided by CEA, external advisers were expected to discuss their visit and review and were required to provide eight hours service

time for each school for an inclusive fee of £350 pounds, with more for extra service (CEA, 2005). When the role of external advisers, albeit gradually, is replaced by SIPs in accordance with revised regulations (DfES, 2006d) and SIPs' commissioning, deployment and management becomes delegated to the LEA, it is hoped that more substantial advice to governing body would be more reliably available. In England SIPs are at present mainly operating in secondary schools and a few primary schools. When sufficient of them are certificated and trained, their role as external advisers will be completely supersede present arrangements in 2008 (DfES, 2006c). Responsibilities for delivering SIPs are shown in Figure 4.1 (DfES, 2006b).

Standardised, structural and fixed forms of principal performance objectives and criteria were not supported in Britain's PPM system. In its present version, only two key performance areas (KPA) are required (DfES, 2001a) concerning pupil progress and teaching and leadership's relation to improving standards of achievement. 'Other objectives' and their monitoring and criteria for achievement are set discursively, as are heads' needs to receive continuous professional development. Methods of reviewing each criterion and standard are mainly based on the National Standards for Headship (NSH), good practice indicating that a range of between 3 to 6 objectives is most appropriate each year (DfES, 2003a), agreed before the start of each performance management cycle (December each year) by the appointed governor, external adviser and head through discussion (DfES, 2001a), consensus objectives being regarded as producing the largest commitment (Welsh Assembly Government, 2002), though heads may register dissent. SMART (Specific, Measurable, Achievable, Relevant, and Time related) principles are used on such objective setting (DfES, 2003a; Welsh Assembly Government, 2002).

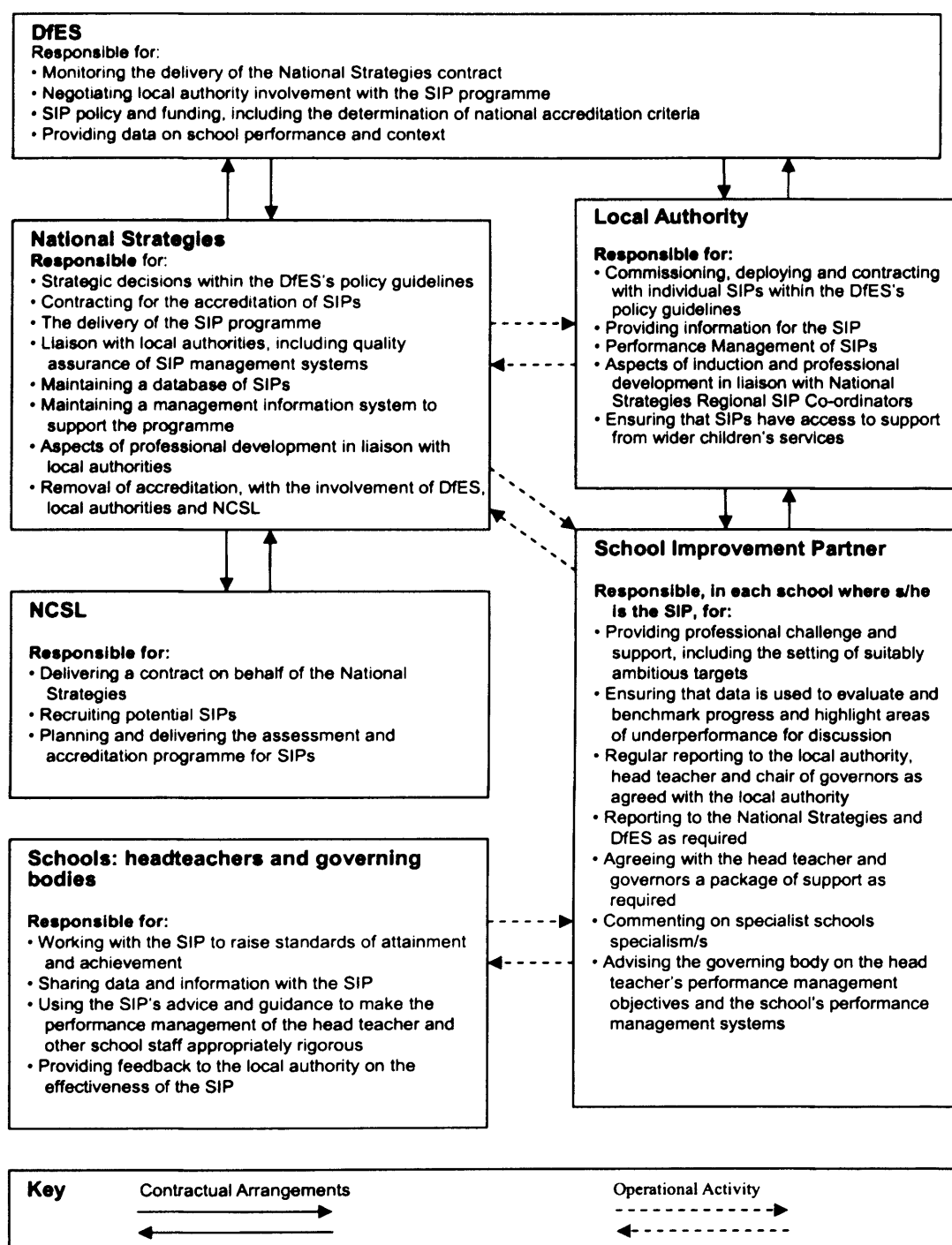


Figure 4.1 Responsibilities for delivering the School Improvement Partner Programme

Source: DfES (2006b). *A New relationship with schools: The School Improvement Partner's brief* (2 ed.) (p.15). DfES Publications.

PPM in the UK goes through three stages of planning, monitoring, and review, summarised in Figure 4.2 (DfEE, 1999). Planning concerns 'issues identified as priorities of improvement' and 'professional development needs' identified after the previous year's review meeting. Guided by SMART, they should focus on current school development/improvement plans, key factors of influencing pupils' achievement, special aspects of leadership and management and specific areas of personal professional development (DfES, 2003b). Monitoring is the responsibility of the appointed governor who can adopt all kinds of ways of data collection, including existing school files or pre-designed observation and discussions with the head, while being able to ask the external adviser to provide professional support. Monitoring is continuous, formally punctuated at mid-term and end year when it culminates in final review of overall performance, confirming achievements, priorities for future improvement and professional development requirements, providing the reference point for objective setting in the coming year. The process produces a brief performance review statement including objectives for the forthcoming year, a time schedule of review and professional development requirements and their arrangement, within 10 days to which heads can add written comments, the final statement going to both the Chair of governors and head. It may be used in recommendations on pay progression. The recommendations for development requirements and activities which emerge are sent to whoever in the school is responsible for planning the training and development of teachers, possibly recommending a range of head teacher activity from participating in various leadership training programmes, such as HIP, LPSH, and NCSL, to taking specific courses helpful to or establishing networking unions with other schools. As to heads' pay progression, the British government has adopted a PRP model, allowing governing bodies make decisions for heads based on the result of performance review. Any

complaints and appeals are referred to review officers, normally chairs of but never teacher governors, so long as they have not been appraisers. Finally, governing bodies may consider making revisions to future cycles (DfEE, 2001a; DfES, 2003a, 2003b).

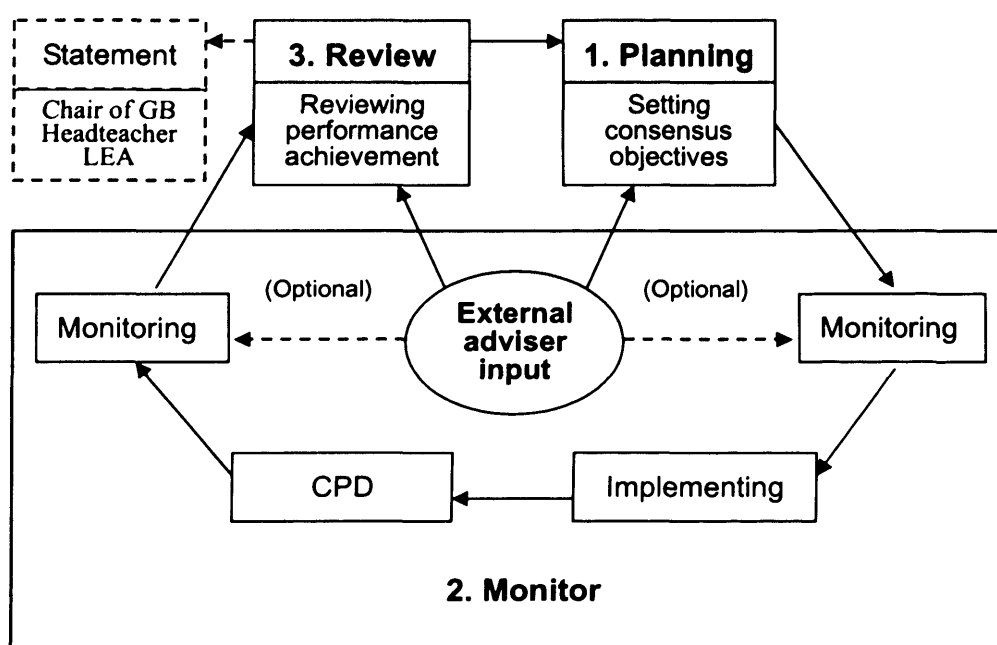


Figure 4.2 Head teacher performance management cycle

Source: DfEE (1999). *Performance threshold for teachers and performance review and pay review of head teachers* (p.11). London: DfEE.

4.2.3 Effects and comments

The new PPM policy is now in its sixth round year in Britain. Its linkage of performance management and performance related pay system has been described as one of its disadvantages (Chamberlin, Wragg, Haynes, and

Wragg, 2002; Cutler and Waine, 1999), while performance management has been said to lay too great an emphasis on 'performativity' as part of a process of commodification of education (Boxley, 2003). However, headteachers, having gone through the experience of developmentally orientated appraisal since 1991, seem not to have explicitly resisted the new system, they and external advisers evincing positive evaluations of the policy (Crawford and Earley, 2004; Jennings and Lomas, 2003). Problems have, however, arisen on the part of inexperienced governors responsible for its implementation (Kerry, 2005). The White Paper *Higher standards, better school for all* (DfES, 2005) published by Labour after winning its third consecutive election in 2005 paid much attention to planning the establishment of a group of excellent principals, the National Leaders of Education to participate in planning for national education leadership and policy. New arrangements for PPM policy in England have also been published in revised regulations (DfES, 2006d) and PPM guidance in October 2006 (2006c), intended to provide more positive support for heads and schools in raising the quality of schools.

While empirical research on the implementation effects of performance management policy in Britain has mostly focused on teachers rather than heads, there are four relevant studies. HMI visited 82 primary, secondary and special schools in 2001-2002 to survey their adoption of the PPM scheme (Ofsted, 2002). Two thirds of the schools were said to be in a good or very good position to implement PPM policy effectively, Heads and governors welcoming its introduction and most positive about the contribution that it could make to school improvement. Two thirds of schools had drafted PPM policies that were fully compliant with the government's requirements and some links had been made in many of the school between heads' and teachers' objectives and the school development plan, but the linkage was

generally underdeveloped. The setting of heads' objectives was generally sound and the process of their appraisal had been intensified by external advisers. Most of the objectives set were generally achievable but many not sufficiently supported by clear criteria to indicate precisely what should be achieved. Pupil performance data were used to analyse strengths and weakness and to identify areas for improvement. In many of the schools, governors' arrangement for monitoring heads' progress were insufficiently structured. Generally they did not use sufficient evidence to judge the extent to which success had been achieved.

Jenning and Lomas (2003) conducted a case study of secondary school heads in East Kent, in which 43 secondary heads were surveyed by questionnaire and 20% of them were interviewed. Most also evinced positive response to the new PPM policy, seeing it as creating closer linkage between school and management systems, helping to integrate heads' job description, school improvement/development plans and pupil performance objectives, confirming professional accountability and facilitating observable raising of standards in classroom. It also clarified the governing body as the line manager of the school in setting heads' objectives, with a help of external advisers, through the annual cycle of appraisal events. At the same time, some heads expressed deep hatred of linking pay to performance, which did not motivate them while others felt that they would like to enjoy the benefits. Some of them also had doubts about the personality and professional ability of appointed governors responsible for appraisal.

Crawford and Earley (2004) interviewed 18 external advisers about their roles in PPM procedures, finding that most valued it in a positive, developmental light, as a process by which governors and heads had been brought closer

together in more relaxed and confident relationships. However, when their relationships were too cosy PPM tended to become ineffective, falling short of setting challenging objectives and rigour at review meetings. The value of external advisers was recognised by many governors but was dependent on their quality. When more and more practising and retired heads became involved in the process, peer appraisal might become rather less challenging with respect of heads' performance. As to the length of time that advisers should serve in the same schools, the majority of advisers, as well as heads and governors appeared to wish to carry on for longer than was currently permitted, again running the risk of warmth of relationship inhibiting rigour. Kerry's (2005) three-year case study in one primary school, examining the role of governors in PPM saw it as a failure of government that responsibility for it might be delegated to ones with neither sufficient experience nor knowledge, who LEAs had failed to train.

Overviewing changing PPM policy implemented in Britain for over fifteen years, its main features and implications can be seen to have concerned concepts and policy planning, operation processes, outcome handling and ancillary programmes. In comparison with many other policy innovations of the past three decades, it appears to have gone through a series of processes driven by central government, including policy preparation, negotiation, legalisation, pilot study, formulation, implementation and policy review that have achieved relative consensus and smoothness of operation. First based on a developmental orientation, the addition of accountability was relatively painless, much depending on the dynamic of relationships between heads and their governing bodies, particularly their Chairs. The cyclic character of the system oriented to performance objectives now pays equal attention to implementing processes and recording outcomes helpful in promoting

sustainable personnel improvement and achieving performance objectives. The external advice highlights a relationship of cooperation, dialogue and shared commitment between governors, external advisers and heads that reflects Stufflebeam's (2003) notion that '(T)he main purpose of evaluation is not to prove, but to improve' and Guba and Lincoln's (1989) idea of 'fourth generation evaluation' that saw appraisal as a process of coordination and communication, capable of positive effectiveness. Objective setting that considers both performance objectives and professional development, emphasising common consensus, SMART principles and flexibility, achieved by appointed governors, external advisers and heads, reflecting schools' backgrounds, job descriptions, professional standards and government requirement of only two KPAs, appears reasonable and acceptable. While the shortcomings of governing bodies are sometimes criticised, the presence and support of trained external advisers assuages susceptibilities and renders processes acceptable to heads.

In achieving desired policy purposes, ancillary schemes for facilitating head teacher performance have been established, including a variety of training programmes and institutions and recruited, trained and managed external advisers/SIPs. Combined with care as to due process and appraisal ethics, beginning with providing principals with full understanding through clear policy guidance, full participation in management processes, clear access to appeal and review mechanisms and assured, confidential personal data processing, regulating identities and authority to access appraisal reports, the relative gradualism and emphasis on shared commitment associated with the introduction of British appraisal marks it as a relative success among recent educational policies, whether regarded as part of the rational progress of reform or increasing, state-led introduction of a culture of performativity and

control in education. Leaving considerations of the latter type aside, there are problems of improving the credibility of non-professional governing bodies (Jenning and Lomas, 2003; Kerry's, 2005; Holman, 1997), time for external advisers to provide appropriate feedback on process during the monitoring stage (Tranter and Percival, 2006) and the fairness of performance related pay policy when it is short of objective criteria and standards, such that pay progression decision dependant on performance might not be reasonable (Jenning and Lomas, 2003; Storey, 2000). It might also be that government should arrange more appropriate times for support or feedback during the counselling stage, whether from external advisers or SIPs to ensure that headteachers obtain maximum value from information for improvement.

4.3 PPM Policy in New Zealand

Until 1989 a centralised education administration system characterised New Zealand. Thereafter, its Ministry of Education (MOE) began to be reorganised and retrench power relationships between central, local government and schools. The model of educational decentralisation reform adopted was a community control model (Leithwood and Menzies, 1998), which devolved responsibility for governing schools to parent-elected school boards of trustees (the board), schools being managed pursuant to the Charter signed between them and central government (J. X. Huang, 2001; Ministry of Education, 2004d). Such reform was officially justified in terms of national budgetary requirements and massive public dissatisfaction about educational quality and the performance of educators (Capper and Munro, 1990). Among other reform issues a PPM system for school principals and teachers was proposed, aimed at intensifying educator and school performance and

removing those incompetent (Fitzgerald, Youngs and Grootenboer, 2003).

4.3.1 Development background of PPM policy processes

The background to PPM policy development in New Zealand is related to its shift from a centralised education administration system to self-managing schools. This, in turn, may be related to relevant aspects of its political, social and economic background (Novlan, 1998), as well as the reform intention's theoretical basis (J. X. Huang, 2001). New Zealand's political system was of a democratic, Cabinet type, the Prime Minister acting as the leader of the majority party in the Cabinet. As a result, as in similar systems, such as that of the UK, all kinds of public policies put forward by the government were rarely denied by the legislature allowing New Zealand, as a hitherto centralist system, to launch all-round education reform quickly in the 1980s. Moreover, some traditional political concepts held among New Zealanders included strongly rooted ideas of local political control and notions of sovereign group priority, self-decision and self-reliance, disdaining centralised management (J. X. Huang, 2001; Macpherson, 1993) in ways likely to help facilitate the establishment of a school-based management system. At the same time, New Zealanders tended to have strong beliefs in social equity, seeing education as an important way of promoting social justice and economic stability. The government, long concerned about investment in education (Novlan, 1998), had intensified centralised management in the name of school supervision and curriculum management from 1914.

As a remote island country in the south of the Pacific Ocean New Zealand was easily influenced by outside economic factors. In the Great Depression in the 1930s, influenced by Keynes' economic and social theory, its government

began to strengthen economic control and welfare expenditure, such that it had become a welfare state by the 1940s, whose government strongly intervened in economic development and social policy (Olssen, Codd and O'Neill, 2004). In the 1970s it underwent the two oil crisis of 1973 and 1979, followed by the impact of globalising economic competition in the 1980s. While government struggled to cope effectively with its deteriorating economic context, other solutions to crisis had to be found (Novlan, 1998). Thus, after winning the election in 1984, the Labour Party recognised the urgency of actively improving national economic conditions, by which the Treasury became the most powerful bureaucratic influence in state policy-making, pursuing an agenda based upon human capital theory, public choice theory and transaction cost economics (Olssen, Codd and O'Neill, 2004: 175). Against this background renewed economic depression, albeit a good deal less severe than that of the thirties, induced dissatisfaction with its performance and expectation of education reform grew in the 1980s (Perris, 1998) among what has been described as a mild, law-abiding and highly educated people, more willing to accept reforms when government faced crisis (Z. L. Chen, 1999). Indeed, when school-based management was launched following government re-engineering it was well supported, only about 5% of all school districts needing help.

The two main reasons acknowledged by the New Zealand government for the economic crisis facing it in the 1980s were inability to compete in global markets and the very high cost of government and its many social programmes and benefits (Novlan, 1998). When Keynesian economic policy failed to cope with crisis as adequately as formerly, the rising political ideology of the New Right in the 1980s combined especially with new liberal ideas (Gordon and Whitty, 1997), as well as new conservative forces, to influence

economic and education reform of (Novlan, 1998). Leithwood, Janzi and Steinbach (2002) pointed out that the New Right has given notions of government, individual, equality and democracy a new interpretation. For example, civil society is viewed as a self-generating mechanism that is against big, strong government, while the power of free markets is argued to be inherently better than inefficient government; only individual choice can lead to the best results for society where democracy is only a tool for the masses to express their needs for, without leadership, popular requirements would lose their rationality. Thus influenced, the New Zealand government advocated downsizing government and social welfare expenditures, intensifying competition and privatisation, reducing the intervention of government in economic markets. In the period 1985 to 1987 public finance crisis management, determination to 'liberalise' education and commitment to new public management practices were all reflected in reform of the education administration system (Z. L. Chen, 1999; J. X. Huang, 2001; Kaboolian, 1998; Olssen, Codd and O'Neill, 2004; Perris, 1998). For example, the dominant ideology of intensifying financial management and improving efficiency of resource utilisation required the Ministry of Education (MOE) to review education management systems, adopting the concepts of decentralisation, competition, choice and contracting out to improve government efficiency and cut down costs. Principal-agents were separated by policy-makers from executors, their respective rights and obligations clarified through the Charter and performance management frameworks to intensify the accountability of school managers and others.

The earliest public school education system of New Zealand with decentralised schools managed by local government had been established by the Education Act, 1877. Some decades later centralised management which

intervened in and supervised the school curriculum grew, such that, by 1984, the MOE had 1700 employees responsible for all school budgets and management, setting the national curriculum and supervising the training and certification of teachers (Mahoney, 2004). Up to 1989 central government and four Department of Education Regional Offices were responsible for supervision and management of public schools in terms of policies and statutes made by central government. Even the salaries of teachers were distributed directly by the MOE.

In 1986, in response to putative, popular dissatisfaction with current system performance, the New Zealand Parliament directed the Science and Education Select Committee to conduct research into three main education problems outlined in the Scott Report. Put briefly, these were, firstly, that educational suppliers easily distorted information about performance in education, secondly, the division of education administration was too detailed and the duties and responsibilities of organizational parts obscure and thirdly, conformism existed in the attitudes and behaviours of administrators. (J. X. Huang, 2001). In 1987, Prime Minister Lange appointed Brian Picot to organise the *Task force to Review Education Administration* hoping it would put forward reform suggestions from different angles for assuaging such 'problems'. In 1988 the Picot Report listed five shortcomings of the education administration system (Perris, 1998): over-centralised and over-interfering administration with too many levels, overlapping decision-making processes and administration resulting in an inefficient, passive and dependent culture; decision-making process that were too minute and complicated, lacking in coordination; shortage of information about standards of pupil attainment; lack of effective school management, marked by ambiguous responsibilities, indefinite objectives and vague accountability; and consumer impotence, such

that community and parents dissatisfied with education performance could do nothing about it.

In 1988 Lange published the White Paper *Tomorrow's Schools: the reformation of education administration in New Zealand* which, based on the suggestions of the Picot Report, focused on the organisational re-engineering of the education administration system, cutting down the organisational framework of the MOE and removing the management level between it and schools, distinguishing policy maker from executor, presaging the framework of NPM established by the State Sector Act, 1988 and Public Finance Act, 1989. While MOE remained responsible for providing school budgets, having contracting the Charter with them, establishing the National Education Guidelines and providing all kinds of education information, schools were endowed with high self management power, playing the role of education agents. And while School Boards of Trustees (the board) were in charge of school management and policy-making, principals would account for the implementation of their decisions. The new education administration system was finally embodied in the Education Act, 1989 and implemented October, 1989 (Mahoney, 2004; Perris, 1998).

The current education administration system of New Zealand has largely maintained the framework set in 1989, with few modifications and is shown in Figure 4.3 (New Zealand Qualifications Authority, 2004).

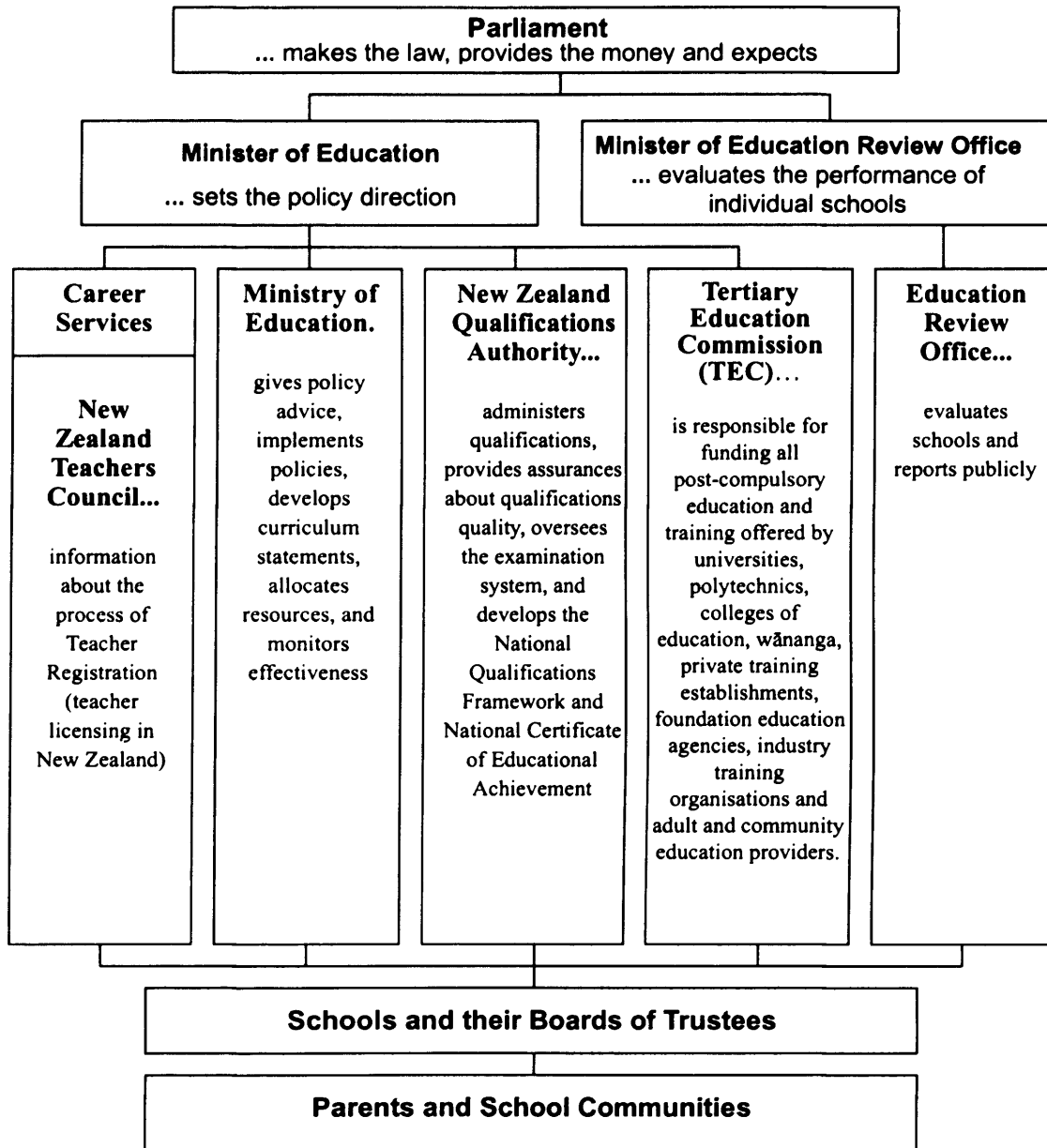


Figure 4.3 The organisation chart of New Zealand education administration system

Source: New Zealand Qualifications Authority (2006). *Education in New Zealand*.
Retrieved April 20, 2006, from Web site:
<http://www.nzqa.govt.nz/about/education.html>

The reorganised system reflected commitment to NPM and was divided into two parts, policy making and performance review (J. X. Huang, 2001; Fancy, 2004). The Ministry of Education (MOE) became responsible for the former, consisting of five departments, while the Education Review Office (ERO) took charge of the latter. These two organisations were independent and parallel with one minister responsible for each. The system was reduced to two levels, the MOE and schools, the latter managed directly by the former, functioning respectively as policy maker and executor. Decision-making powers with respect to policy implementation were given to schools, aiming to make usage and management of school resources more efficient and flexible. Boards at the community level, mainly composed of representatives of parents, ran and were accountable for schools. Each school's board constituted the legal employer of its principal and teachers, appointing them, setting up the Charter signed with MOE, managing according to statutes and supervising achievement of performance objectives and a performance management policy for principal and teachers (Collins, 1999; Dyer, 1998; Neport, 2001). Boards were also responsible for distributing and managing school budgets (Mahoney, 2004).

A school Charter, a contract signed between schools and government based on common consensus on school development objectives, reflecting its visions, values, and objectives, was to be put forward, complete with a development plan in accord with National Education Guidelines after full consultation with the community, for approval from the MOE. Having approved and signed, the MOE provided school budget, reviewed as to school achievements before renewal on a long term policy planning cycle of 3 to 5 years (J. X. Huang, 2001; Ministry of Education, 2004d). National Education Guidelines pursuant to the Education Act, 1989, embraced

(Ministry of Education, 2003; 2004a; 2004b; 2004c) goals, curriculum, teaching, learning, assessment and administration, as depicted in Figure 4.4 (Newport, 2001).

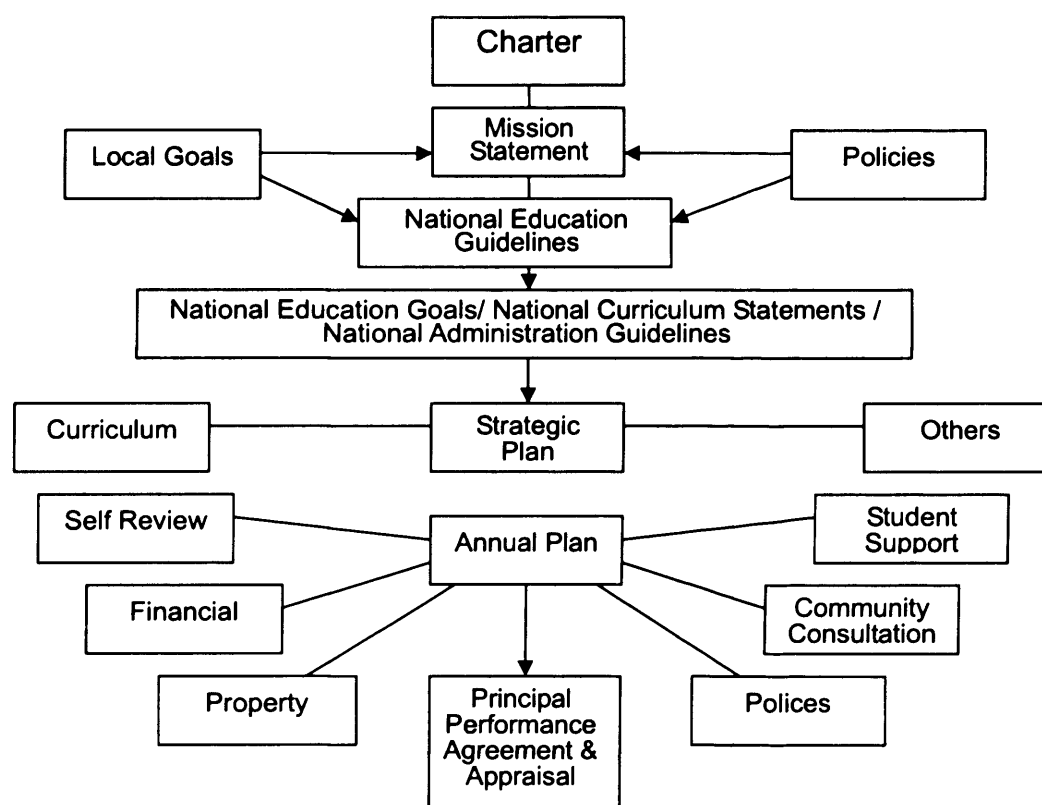


Figure 4.4 The positioning and operational process of school charter

Source: Newport, R. (2001). *Education in New Zealand* (p.10). New Zealand School Trustees Association. Retrieved August 30, 2004, from Web site: [http://www.saasso.asn.au/often_Updated/whats_new/archived_whats_new/Beyond P21-NZ.pdf](http://www.saasso.asn.au/often_Updated/whats_new/archived_whats_new/Beyond_P21-NZ.pdf)

The concept of “seamless education system” was put forth to highlight the importance of life long learning (Fancy, 2004) and a complete Accountability Framework established to review and manage the performances of boards,

schools, principals and teachers. Schools are responsible to the MOE through the Charter, and principals and teachers to the board through a Performance Management System. Accountability was sought at the school administrative level through an Education Review Office, an independent governmental organisation with 120 inspectors working in ten regional offices, according to criteria of performance management, on average once every three years covering teaching quality, learning quality, the role of boards in school governance and management, embracing staff appointments, employment and training, health and security, assets and resources and relationship with school communities (Ministry of Education, 2004d). According to the regulations of the Education Act 2001, all boards must put forward an annual report to MOE to be evaluated for progression in terms of the school's charter. Schools must self review pupils' achievement objectives and report to the community as to finance and Charter objectives. Boards must also plan an effective performance management system to ensure achievement of objectives, including a PPM according to the performance standards and processes acknowledged by both parties (Collins, 1999; Ministry of Education, 1997). The MOE collected the experiences of other schools with respect to the performance management in 2004 and compiled a more detailed resource for reference by boards and principals concerning Principal Performance Management (Ministry of Education, 1998b), seeing it as an important means of intensifying the work of those responsible to policy-makers and ensuring education quality following decentralisation.

4.3.2 Policy contents and processes

PPM policy is one of the educational administrative reform measures of the system in New Zealand aimed at improving education quality and

accountability which has now run for about ten years as part of a wider policy that regards performance management as a process for identifying, evaluating and developing school staff work performance. Its government has viewed principals as key resources in ensuring school effectiveness meriting regular investment in their upkeep and maintenance (Ministry of Education, 1997). Decentralised school boards and their principals are enjoined to agree performance and professional development objectives and engage in yearly appraisal with feedback (Ministry of Education, 1997; 2004d). These must be combined with school objectives. While the policy is national, its initial planning intimately related to decentralisation and Charter accountability, the school boards are responsible for its implementation, following regulations. Government is not involved in the training and management of external advisers as in Britain.

As we have already noted, policy originated in the State Sector Act, 1988 and Education Act, 1989, while the 1993 National Administration Guidelines required boards to develop and implement personnel performance management policies that complied with MOE policy and procedural frameworks (Ministry of Education, 1997). Draft National Guidelines for Performance Management in School in 1995 followed one year policy trial and then led to a Performance Management System being formally established in 1997, government thereafter collecting the experiences of different schools so as to provide a resource manual of PPM for schools as reference (Ministry of Education, 1998b). In addition interim Professional Standards for Principals were put forward by government in 1998 to be used as part of principals' performance agreements (Ministry of Education, 1998a). In this way, the three steps of policy-making, implementation and monitoring were closely related through initial regulation by statutes, issuance of central

government procedural principles for implementation and school Boards taking responsibility for detailed operation and official review through Charter implementation in an attempt to ensure that policy was exercised functionally and effectively. Government's PPM policy objectives were clearly both accountability and development (Ministry of Education, 1997; 2004d) and based on an assumption (Collins, 1998; Ministry of Education, 1998b) that principals could effectively achieve objectives set out in the Charter in raising the quality of schools, suitably supported. Seven key principles were to be followed in performance management and PPM systems (Ministry of Education, 1997) including professional orientation, flexibility, consultation, transparency, guarantee of hidden agendas or ulterior political purposes, integration with other, key performance management elements and human resource functions, timeliness and confidentiality over the annual cycle within which schools were also required to put forward their Charter reports to the MOE.

Under principal-agent theory principals were both chief executive of their Boards and their employees, subject to appraisal, while, concomitantly, Boards not only played the role of employers but also of partners to principals in managing their schools, their primary relationship embodied in that between principals and Board Chairpersons, the latter involving other members or appropriate professionals particularly where principals' own teaching required appraisal (Ministry of Education, 1997). Boards might decide whether to use government funding to employ outside consultancy to help with their work, including training (Ministry of Education, 1998b). Performance agreements drawn up between boards and their principals included statements as to aims and contexts, job descriptions, professional standards, performance and development objectives (Ministry of Education,

1998b), the former including key tasks, objectives and expected outcomes in relation to administrative, curriculum and teaching, personnel and finance management, relationships with the community and professional development. The contents of professional standards for principals were grouped in six dimensions including professional leadership, strategic, staff, relationship (community) and financial and asset management: focusing on effectively planning, using and managing all properties and resources and statutory and reporting requirements, as well as others agreed to in the light of school circumstances, each typically determined for appraisal purposes by two or three for dimensions (Ministry of Education, 1998b). Performance objectives, set at the beginning of each PPM cycle, usually concerned school vision/mission, charter goals/objectives and the priorities identified as part of school strategic plans, key tasks and responsibilities and professional standards the official view of which, in order to provide deep and high quality scrutiny, that Boards should be advised and principals should focus on no more than two or three aspects of performance objectives each year. For example, principals might decide that priority performance objectives for a given year were to improve information teaching, develop of teaching staff and review teachers' performance management. By rotating focus between appraisal periods both over time and by objects all aspects of principals' roles could be appraised (Ministry of Education, 1997). SMART principles are followed in setting principal performance objectives and appropriate financial or other support for principals' professional development to meet performance objectives was to be provided by Boards. This one year, cyclical system, which divided into five stages, including performance planning, mid-term feedback, self appraisal, formal appraisal and concluding interview, is shown in Figure 4.5.

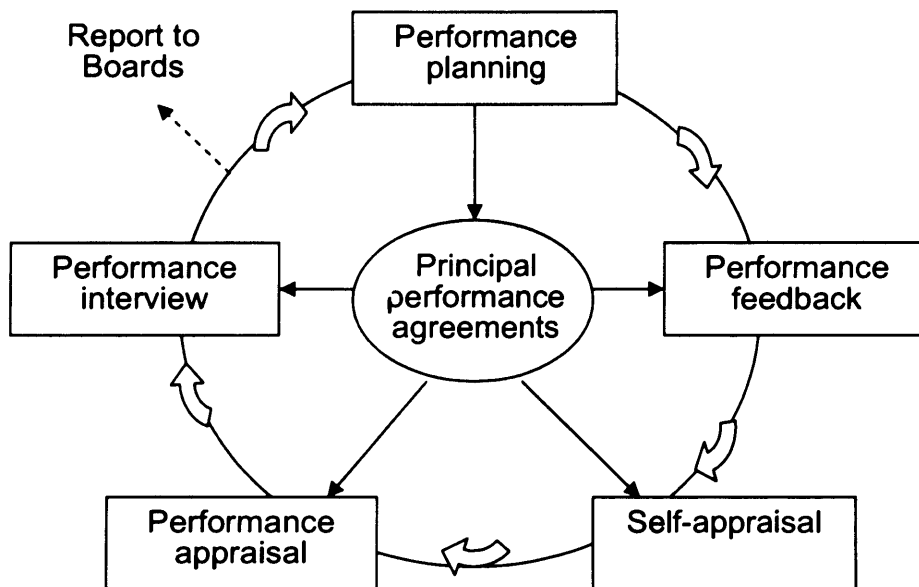


Figure 4.5 The operational process of the PPM system in New Zealand

Performance planning is based on an annual agreement in relation to job descriptions, professional negotiating and annual performance and professional development objectives, to be annotated and monitored. Performance feedback may involve regular meetings between principals and Board Chairpersons and may draw in senior staff and consultants, taking up monthly reports, parents' requests for feedback and scrutiny of performance data collected by agreed methods. Self-appraisal is regarded as a highly personal and private activity deemed unsuited to be recorded in report form shared by others (Ministry of Education, 1997).

Formal performance appraisals have usually been conducted at the end of

term and are regarded as best thought of as taking place between Board Chairpersons and principals through private but open-mind dialogue characterised by high trustfulness and mutual understanding. Other persons with clear responsibilities may be involved. (Ministry of Education, 1997; 2004d) Indicators or criteria identified for objectives should balance between quantitative (the more readily measured) and more qualitative aspects of principals' performance (Ministry of Education, 1998b). Some schools have come to disperse appraisal meetings across the year, each one dealing with a few criteria with a variety of degrees of formality, culminating in one, formal appraisal interview, report and ensuing time schedule. Chairpersons report these to the Board along with adjustments of remuneration, whereupon Supplementary Grants may be used in bonus payments or to fund principals professional development, or other management purposes (Ministry of Education, 1998b). As employers Boards take a final decisions in disputes, using independent arbitrators.

4.3.3 Effects and comments

As with Britain there is little direct research evidence with respect to the effects of PPM policy, most research, again, focusing on teachers but not principals. It is to this related research that we must mainly turn for clues as to effects. Piggot-Irvine (2000), reviewing the period from 1996 to 1999 with middle and senior managers pointed out that there about 66% of respondents held positive attitudes toward the positive impact that intensifying accountability had on schools ('It wouldn't have been implemented fully in this school without the legislation'), heightening awareness of and giving guidance on professional responsibilities and expectations, providing guidance on appraisal, greater awareness about their own performance, a push to ensure

that the existing system was more effective, linking appraisal with professional standards, more focus on staff development, better identification of staff strengths and weakness, regularising performance feedback, increasing funding available for training and standardising expectations. The predominant negative impact noted concerning tightening of appraisal legislation was related to lack of time to conduct it, while other criticisms claimed that it had made schools more compliant while being neither effective nor efficient.

While New Zealand's governments have set out upon educational decentralisation reform since 1989, the accountability framework which embraced its PPM policy was only launched in 1997 and has now operated in primary and secondary schools for about ten years. There is little evidence to confirm its success, set in the context of reform predicated on new public management and principal-agent perspectives and characterised by intensified central government-school, contractual, Charter relationships. It has, at the same time, been marked by eclecticism and combined emphases on performance with supportiveness, empowerment and accountability. As in Britain, one of the main problems of PPM processes as implemented in New Zealand has been delegation to Board Chairpersons lacking sufficient professional knowledge, skills and understanding. Robinson, Ward, and Timperley (2003) argued that, contrary to some of the tenets of NPM, setting and monitoring of policy requires levels of task-related expertise that most school Boards do not have, engendering reliance on the advice and guidance of principals themselves, who ought to be the proper object, rather than author, of their ministrations. Though they may employ them, the unplanned and untrained manpower of consultants might not fill the gap between their needs and public expectations, a ready source of compliance and timidity.

4.4 Principal Appraisal Policy in Taiwan

Primary and junior high school principals in Taiwan have been regarded as civil servants since 1945, as with others, receiving annual performance ratings as the basis for performance bonus and movement on pay spines. Since 1971 they have had their own performance rating regulations, whose formal implementation has remained limited. In the last ten years education reform in Taiwan has been heavily influenced by greater plurality of social values and changing education ideas of the publics. Changing educational laws have sought to shift traditional principals' roles away from administration toward strategic leadership and management of school planning with respect of curriculum and teaching. They are now required not only to take responsibility for raising student attainment but also to share decision-making powers with teachers and parents as a legal requirement, being not only instructional, moral, participative and contingency but 'transformational' leaders (Leithwood and Duke, 1999). In face of such change to plural roles central government was forced to change policies for their appointment in 1999 from educational administration offices to public selection by Principal Selection Committees (PSC) organised by local government. Incumbent principals were also required to accept performance appraisal from local government prior to the end of their four year terms of office, whose outcomes provided the basis of their re-appointment. Consequently, principals not only now have to be rated once a year for pay purposes but performance appraised once every four years for reappointment. The purpose of both is still mainly summative, emphasising accountability not development, roughly the opposite of Stufflebeam's (2003: 4) dictum that we noted earlier that 'evaluation's most important purpose is not to prove, but to improve.'

4.4.1 Development background of PPM policy processes

In the recent decade principal appraisal in primary and junior high schools has undergone different processes of change which are best set against the current system of educational administration and its reform background. Taiwan has, in common with many other countries, two levels of educational administration focused upon a Ministry of Education (MOE) in central government and Bureaus of Education (BOE) in 2 special Municipalities and 23 Taiwan Provincial County or City governments. Their relationships are outlined in Figure 4.6. The MOE directs, supervises and controls BOEs which chiefly supervise educational and academic institutions and plan and manage libraries, museums, public stadiums, and gymnasiurns

Educational reform in Taiwan has been wavelike since 1990 following trends in the rest of the world, amid changing political and social environments, advocated by groups in civil society, scholars and governments. Its dominant principle has been deregulation, seeking new balance between government, schools and parents. The social democratisation movement has quickly spread since 1987 when martial law was revoked and press restrictions lifted in 1988. Since the 1990s, the ruling party, Kuo Min Tang (KMT), has faced strong challenge from the Democratic Progressive Party (DPP) intent on pursuit of independent sovereignty for Taiwan and social reform. Parliamentarians have tended to support more the voice of education reform as good, popular electoral politics in face of government bureaucracy and conservatism. In the last decade or so the Legislative Yuan has passed or amended with respect to education the Teacher Education Act (1994),

Teachers' Act (1995), Amendment of Statute Governing the Appointment of Educators (1997), Educational Fundamental Act (1999) and Compulsory Education Act (1999), consistently reflecting support for education reform groups.

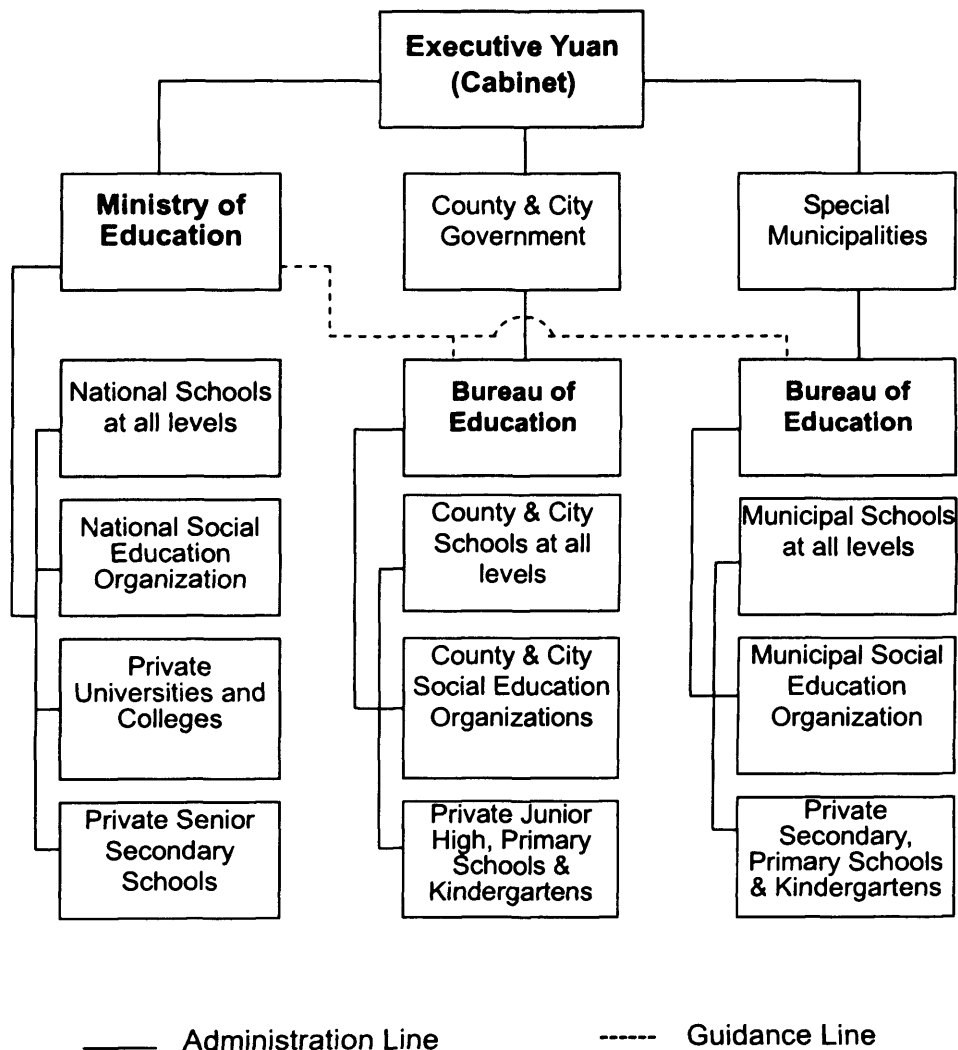


Figure 4.6 Current educational administration system of Taiwan

Source: Ministry of Education (2005). *Education in the Republic of China (Taiwan)* (p. 11). Ministry of Education: Taipei.

After martial law was lifted the Civil Associations Act led to the establishment of many such groups, including the Union for Facilitating Teachers' Human Rights (1987) with the purposes of 'pushing forward education reform, guaranteeing teachers' rights, maintaining teachers' dignity, and respecting academic freedom', the Humanistic Education Foundation (1987) intent on 'promoting human oriented education and paying attention to the rights of being educated and the subjectivity of study' and the Homemaker's Union and Foundation (1989) aimed at 'pushing forward parent education, improving education environment, establishing the organisation and function of Parents Association, and respecting the education rights of parents' (Wu, 1998). Two big national education conferences in 1988 and 1994 sought common understanding with respect to directions of education reform and the basis for Ministry of Education (MOE) policy. Later the Committee of Education Reform for the Executive Yuan (CEREY) (similar to the Cabinet in the UK and NZ) was established to conduct consultation on national education reform, during 1994-1996, conducting visits to different places, holding conferences and doing research on various aspect of reform topics, putting forth the *Final Report of Education Reform for the Executive Yuan* (CEREY, 1996), which became key guidelines for MOE policy. In 1997 national and local education reform groups were united into a more powerful group, the Educational Reform Association in Taiwan (ROC), to urge the MOE to carry out its reform commitments, continually holding discussions on education issues and actively participating in policy making. After the Teachers' Act was passed in 1995, teacher groups were empowered to establish the School Teachers' Association at school level, the Local Teachers' Association at local level and the National Teachers' Association at central level so that they might fully participate in educational decision-making, as well as assuring their rights to professional autonomy and guaranteeing their personal rights.

Education has been gradually decentralised from central to local government to school and school management styles have changed from principal autocracy to shared decision-making with teachers and parents in ways similar to moves to local autonomy in management, school-based management, teacher professional autonomy, teacher empowerment, and educational choice privileged in the UK, USA and elsewhere since the 1980s. Since the Education Fundamental Act came into force in 1999, the central government has been mandated to plan, design, fund and supervise systems in according to the statutes, ensuring local compliance with national legislation, establishing and supervising national schools and other educational institutions, reviewing and researching policy research and assisting and facilitating development of education businesses and affairs concerning ethnic minorities or disadvantaged groups. All else falls under the authority of local government which may make self-government ordinances (Cheng, 2004a). In addition, powers of teacher employment have been delegated to School Teacher Selection Committees in every school on which teachers have over two-third membership. Textbook selection is devolved to schools from local government. Emphasis is laid on teacher professional autonomy and parental education participation in schools' affairs has been more active than formerly

The move to make education management more democratic, open, and plural has produced conditions very different to those that characterised the period of enforced martial law when it was authoritarian, enclosed and conservative. All reform stemmed from government and was slow until the pedagogic recontextualising field (Bernstein, 1996) gradually took democratic shape, pursuing a loosening of education laws, devolving of education powers to

local government, changing the principal selection system, opening up processes of textbook audit and marketing, adoption of national curriculum guidelines instead of national curriculum standards which were too specific to be adjusted flexibly, stressing concepts of individualisation, matching aptitudes, plurality and flexibility in teaching methods and highlighting ideas of teacher professional autonomy, student learning rights and parental choice. The influence of teachers and parents in school decision-making increased under these more democratic, open and plural impulses and emphasis on the rights of disadvantaged groups, such as those with special education needs and original inhabitants, grew. The quality of students' subjective experiences of learning has long been an active issue. More localised curricula and education policies, less mainland China and more Taiwan-oriented, began to be privileged and implemented in primary and junior high schools.

At the same time, politics still dominated and interfered with decision-making in education even after democratisation. Many education reforms have been outcomes of political wrangling rather than a real social consensus, for example, the setting up School Teachers' Associations in schools and allowing teacher participation in principal selection committees. Turmoil on campus and in schools has often arisen from lack of balance between power and responsibility in schools, some radical teachers and members of Parents Associations challenging the powers mandated to and authority of principals. Teacher and parent zealotry in pursuit of educational democratisation has, in some cases, led to neglect of the necessity that principals' 'power should correspond to duty', compromising the effectiveness of their leadership and management and administration (Q. S. Wu, 1998).

In a structural analysis of education reform over the last two decades, Qiu

(2000) discerned six stages, from enforcing martial law (1949-1987) when education management systems were highly centralised and autocratic with central control and supervision of policies concerning personnel, curriculum planning, textbook publication and school budgets, especially with respect of primary and junior high schools, which were basically regarded as government tools for exercising ideological control, to a stage of reflection and critique on education reform (2003-2004), by which time twelve distinctive lines of educational reform had been implemented and derivative problems had emerged. A number of academic and civil groups, such as the Happy Learning Education Reform United Group and Rebuilding Education United Group, established in 2003, united to strongly criticise some policies. The former blamed them for inducing student unhappiness, while the latter published a *Manifesto for Rebuilding Education* pointing out thirteen failed aspects of reform in the preceding decade and putting forward appeals for their review, greater transparency, respect for professionals, care of disadvantaged students, maintenance of social justice and pursuit of high quality and improved interest in study. Although the MOE genuflected in their direction, their effect dissipated after the Presidential Election in 2004.

Though the main objects of reform were not directly related to PPM they induced more open, democratic and plural direction in the education environment. Centralised education management systems gradually disintegrated while principals were selected locally and became school accountable, open to teachers' and parents' voices. The responsibilities and roles of principals were becoming very different from those of the past, both changing and intensifying. Awareness grew that policies for principal professional development and performance were neglected and a problem existed of establishing a more reasonable system concerning these issues.

The development of school principal appraisal in Taiwan can be dated back to the annual principal performance rating which began to be implemented in 1945. The laws upon which it has been based have undergone several changes from the period 1945-71 when they were conducted under Civil Service rules but easily influenced by political intervention and subject to much critique concerning the formalisation of ratings and their facilitation of politically oriented appointments (S. M. Chen, 1981; Q. C. Zhang, 1996), through the 1971 Regulations detailing the domains to be rated, grading, awards and punishments, rating procedures, the rating committee and complaint procedures, regularly amended and renewed, until the 2003 National Education Law and 2006 Regulation of Principal Performance Rating for under Senior High Schools. Until recently rating procedures and rating committee membership had not changed substantially and it was doubtful whether problems of bureaucracy, formalisation, subjectivity, and politicisation on annual principal performance rating had been greatly assuaged. (S. M. Chen, 1981; Jiang, 1977; Luo, 1995; Q. C. Zhang, 1996). Annual performance ratings neither provided for accountability nor facilitated principal professional development.

Amendment of Article 9 of the Compulsory Education Act, 1999 laid down that principals could only serve at most two successive terms of four years in one school and would be appraised after each, upon which reappointment, placement in another school or return to a teaching post took place. Since then principal performance appraisal by local government organised PSCs, composed of at least one fifth representatives of School Parents Associations and representatives of scholars, educational administrators, Local Teachers' Associations and members of the community of high social reputation and

integrity, has become both annual and end of term. In some local government areas a great deal of latitude is given to teachers and parents to air their views during selection processes so that political wrestling, dispute and conflict become unavoidable. My participation in PSCs in three local government areas over the past six years has borne in on me the dilemmas and weight of such disputes and the effects of the new appointment system on the changing working environment of principals, some excellent ones even indignantly choosing to retire early rather than be selected by teachers (B. S. Chen, 2001; M. Q. Qin, 2002; Z. M. Tang; 2002; Q. S. Wu, 2002). End of term performance appraisal still has the same purpose as annual performance rating, summative, focusing on accountability rather than being formative, stressing improvement or development.

4.4.2 Situation of principal appraisal in local counties/cities

The policy as it exists in Taiwan is regulated by central government but it is local government's task to appoint or renew suitable individuals. There are considerable differences characterising processes in different places, some counties/cities using only simple appraisal checklists to judge performance, others adopting overall school evaluation results as their point of reference, while yet others carefully seek to understand their performance and clarify the means of its improvement. Given this lack of uniformity, I collected schemes of principal appraisal from various counties/cities and sent a questionnaire to directors of Bureaus of Education in all 23 of them so as to clarify knowledge of varying, actual practice. At that time I was still working in local government where my relationship with these individuals guaranteed their compliance with my request. These will be discussed in terms of policy planning and design, operating process and outcome treatment/

The methods used to collect this were questionnaire survey and content analysis. The questionnaire content, which is given in Tables 4.1 to 4.4, along with a summary of responses, was based on a combination of the range of practice that I knew to be occurring in Taiwan and the categories to which I was hoping to relate them, as revealed by my investigation of British and New Zealand experience, included sixteen questions with respect to principal appraisal or school evaluation for principal selection. I did not pilot or trial the instrument, nor seek tests of its validity and reliability, aiming simply to get quick, preliminary insight into current Taiwanese arrangements. For this reason I have not reported this as part of my methodology chapter and offer it simply as a snapshot, where before there was no systematic image, of the area of my concern. As stated, all twenty three directors of Education Bureaus completed all questions, most requiring single-choice responses, while some were multiple-choice. The questionnaire was analysed using descriptive statistics (frequency and percentage) on total responses. Content analysis of documentation of their schemes was gathered and coded, using the same categories as those emerging from questionnaire analysis, providing comparative data across Taiwanese authorities for the first time.

4.4.2.1 Policy planning and design

Concerning policy planning and design, questions were mainly directed at issues of formulation. What were the main purposes of principal appraisal? How long was the appraisal cycle? How were appraisers chosen? Who was chosen and why? What criteria and indicators were used in appraisal? The results of data analysis from 23 counties/cities are assembled in Table 4.1 and Table 4.2.

Table 4.1 shows that only two of 23 counties/cities (9%), Miaoli and Tainan, implemented principal appraisal according to the Act and seven (30%) used whole school evaluation instead as reference for judging principal performance, including Keelung City, Taipei County, Hsinchu County, Taichung County, Tainan City, Kaohsiung County and Kaohsiung City. Tainan City conducted principal appraisal under the name of school evaluation so that it could also be regarded as implementing the former. The remaining 14 counties/cities (61%) did not conduct principal appraisal.

Table 4.1 Situations of planning an appraisal for principals in 23 counties/cities

| Counties/cities | | K L C | T P | H C | M L | T C | T N | T N C | K H | K H C | O T s | S u m | % |
|--|--|-------------|--------|--------|--------|--------|--------|-------------|--------|-------------|-------------|-------------|-----|
| Questions | Items | | | | | | | | | | | | |
| Is there Principal appraisal or school evaluation for the principal selection? | 1. No | | | | | | | | | | 14 | 14 | 61% |
| | 2. School evaluation for principal selection | Y | Y | Y | | Y | | Y | Y | Y | | 7 | 30% |
| | 3. Principal appraisal | | | | Y | | Y | | | | | 2 | 9% |

KLC: Keelung City; TP: Taipei County; HC: Hsinchu County; ML: Miaoli County; TC: Taichung County; TN: Tainan County; TNC: Tainan City; KH: Kaohsiung County; KHC: Kaohsiung City. OTs: Others.

Of the nine counties/cities (see table 4.2) which had formulated principal appraisal or school evaluation all used it for selecting and transferring principals, seven to improve school operation and four to handle incompetent principals and to provide professional development, respectively. Eight of the nine counties/cities implemented appraisal every year, in which most were once, a few twice, but only for principals coming up for reselection. In the three counties/cities, the method adopted was one-off, not systematic, cyclical performance management, neglecting improvement. Among these three counties/cities, including Tainan City, which could be said to have formulated principal appraisal under one name or another, its main purposes in Miaoli

Table 4.2 Policy planning of principal appraisal in nine counties/cities

| Counties/cities | | K L C | T P | H C | M L | T C | T N | T N C | K H | K H C | S u m | % |
|---|---|-------------|--------|--------|--------|--------|--------|-------------|--------|-------------|-------------|------|
| Questions | Items | | | | | | | | | | | |
| The purpose of implementing the appraisal | 1. Performance rating | Y | Y | | | Y | | | Y | Y | 5 | 56% |
| | 2. Selecting and transferring principals | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 3. award and punishment | | | | | | | | | | | |
| | 4. handle the unqualified | | | | Y | | | Y | Y | Y | 4 | 44% |
| | 5. improve school operation | Y | Y | Y | Y | Y | | | Y | Y | 7 | 78% |
| | 6. professional development | Y | Y | Y | | Y | | | | | 4 | 44% |
| | 7. others | | | | | | | | Y | | 1 | 11% |
| Cycle of appraisal | 1. Implement regularly: several times each year | 1 | 1 | 1 | | 2 | 1 | 1 | 1 | 1 | 8 | 89% |
| | 2. Implement irregularly: several times each year | | | | 2 | | | | | | 1 | 11% |
| Ways of appraiser appointment | 1. Chosen and appointed by Local Government | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 2. Chosen and appointed by the committee | | | | | | | | | | | |
| | 3. Occupied by other committee members | | | | | | | | | | | |
| | 4. Others | | | | | | | | | | | |
| Sources of appraisers | 1. Educational administrators | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 2. Principals | Y | | Y | | Y | Y | Y | Y | Y | 7 | 78% |
| | 3. Scholars and experts | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 4. Representatives of teachers | | Y | | Y | | | | Y | Y | 4 | 44% |
| | 5. Representative of parents | | Y | | | | | | | Y | 2 | 22% |
| | 6. Social justice defenders | | Y | | | | | | Y | | 2 | 22% |
| | 7. Others | Y | | Y | | | | | | | 2 | 22% |
| Appraisal criteria and indicators | 1. Implementation of education policies | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 2. School running and management | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 3. School organisational climate | Y | Y | Y | Y | Y | Y | | Y | Y | 8 | 89% |
| | 4. Leaders for teaching | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 5. Professional development | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 6. Human relationship | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 7. Other important indicators | | Y | | Y | | | Y | | | 3 | 33% |

KLC: Keelung City; TP: Taipei County; HC: Hsinchu County; ML: Miaoli County; TC: Taichung County; TN: Tainan County; TNC: Tainan City; KH: Kaohsiung County; KHC: Kaohsiung City.

County were to understand principal performance and response to expectations of educational reform and to provide a basis for reappointment, in Tainan County provision of important quantitative data and to provide a basis for improving school management quality and in Tainan City to present concrete principal performance data as referent for the PSC. These and all others were almost entirely summative in nature, having little to do with improvement and professional development in many counties/cities.

Appraisers were chosen by local government in all nine counties/cities and included educational administrators, scholars, experts and principals. Four counties/cities allowed teacher representatives to participate in principal appraisal or school evaluation, while two allowed parent representatives and social justice defenders, respectively, to participate in the latter. Miaoli County allowed teacher representatives to participate, while appraiser teams in Tainan County and Tainan City were composed of educational administrators, scholars and experts and principals' peers. We see here a limited response to and respect for the aspirations of teacher and parent groups in these inchoate patterns, though reflecting trends elsewhere to allow multiple stakeholders to participate in principal appraisal (Black, 1995; Razik and Swanson, 1995), particularly of the formative kind where teachers and parents have some standing as providers of feedback (Murphy and Rodi, 2000) without directly becoming appraisers which would tend to produce rather great pressure and even hostile, negative effects on principals (Buser and Bank, 1984; Drake and Roe, 1999; Dresslar, 1987). These tendencies count among the reasons why more and more principals in Taiwan seek to maintain good human relationships with teachers and parents, can be hesitant to promote important policies in schools and can be afraid of offending teachers (B. S. Chen, 2001).

Appraisal criteria and school evaluation indicators may cover almost anything directly related to principals' responsibilities in schools, including: implementing education policies, school administrative management, school organisational climate, teaching leadership, professional development and human relationships. In Miaoli County they included teaching leadership, school management, human relationships, professional responsibility and school special features, for example, musical skill and activity. Tainan County's criteria covered five levels: implementing decrees and policies, school management, teaching leadership, human relationships and administrative communication, professionalism and professional development, while Tainan City had devised seven categories: action plans and pursuit of school objectives, leadership style and school management, curriculum and teaching leadership, administrative performance, organisational climate, usage of resource and facilities and professional development. Most other counties/cities also opted for a wide range of principal appraisal criteria and tended to focus on behavioural aspects of principal leadership and management, with far less attention to students' performance. Hart (1994) argued that principal appraisal indicators and standards should take school environment and background into consideration. Redfern (1980) had earlier suggested that they should be adjusted according to the experience and abilities of principals. However, most Taiwanese counties/cities incline toward universal appraisal indicators and standards, neglecting environmental or contextual differences, indicating a problem unresolved.

4.4.2.2 Operation process

Key features of the manner and conduct of the principal appraisal are given in Table 4.3, mainly focusing on appraisal time, methods, tools and procedures.

It shows that all nine counties/cities adopted group appraisal, all appraisers arriving at a school at the same time to collect data in terms of pre-defined schedules, appraisal methods, and appraisal indicators. The advantage of group appraisal is that it can provide multiple views and mutual support, as well as saving time and avoid interference with school affairs. Its shortcoming is its costs in time and other resources (Gilbert, 1990). In all nine counties/cities pre-defined schedules, methods and appraisal indicators were employed over very limited time periods (one day in five counties/cities and only half a day - less than four hours - in four, including Keelung County, Miaoli and Tainan County and Tainan City). It must be suspected that such time for appraisal is too limited to enable accurate, on-site, group review to take place. It is doubtful whether sufficient data can be collected as the basis for judging principal performance in such limited time, particularly in regard to one-off appraisals large schools.

Table 4.3 also shows that all counties/cities adopted both quantitative and qualitative data collection methods to provide appraisal indicators, using documentary review, observation, questionnaire and interview. Five adopted clearly defined and structured tools indicating clearly measured standards and grades while four employed semi-structured tools, permitting some degree of openness. Miaoli County mainly used checklists with self-review and appraiser review and comments, Tainan County a Likert-style scale for basic school data and teacher, parent and community questionnaires, while Tainan City had designed its own format to include appraisal items, review methods, self-appraisal, appraiser on-site review, appraiser comments. While most adopted both quantitative and qualitative forms of data collection and attempted to match up on-site evidence with appraisal indicators, time, as we have noted, was limited and methods and tools inevitably restricted.

Table 4.3 Implementation process of principal appraisal in nine counties/cities

| Counties/cities | | K L C | T P | H C | M L | T C | T N | T N C | K H | K H C | S U m | % |
|--------------------------|--|-------------|--------|--------|--------|--------|--------|-------------|--------|-------------|-------------|------|
| Questions | Items | | | | | | | | | | | |
| Way of on-site appraisal | 1. All members of the appraisal committee conduct appraisal | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 2. Individual members conduct appraisal | | | | | | | | | | | |
| | 3. Others | | | | | | | | | | | |
| Appraisal time | 1. Several days each time | 0.5 | 1 | 1 | 0.5 | 1 | 0.5 | 0.5 | 1 | 1 | | |
| Appraisal methods | 1. Quantised data | | | | | | | | | | | |
| | 2. Qualitative description | | | | | | | | | | | |
| | 3. Both quantised and qualitative appraisals | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| Appraisal tools | 1. Structural tools: appraisal criteria, indicators, standards, and grades are clearly defined. | | | Y | Y | | | Y | Y | Y | 5 | 56% |
| | 2. Semi-structural tools: part of appraisal criteria, indicators, standards, and grades is decided and part is open. | Y | Y | | | Y | Y | | | | 4 | 44% |
| | 3. Open tools: there are no fixed appraisal criteria and standards. | | | | | | | | | | | |
| Appraisal process | 1. Training of appraisers before appraisal | | Y | Y | | | | | | Y | 3 | 33% |
| | 2. Illustration meeting before appraisal | Y | | Y | Y | | | Y | | Y | 5 | 56% |
| | 3. Meeting of appraisers before appraisal | Y | | Y | Y | Y | Y | Y | Y | Y | 8 | 89% |
| | 4. Self-appraisal of the principal | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 5. Briefing from the principal | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 6. Observe the actual performance of the principal | | | Y | Y | | | | Y | | 3 | 33% |
| | 7. Document review | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 8. Interviewing principals | | | Y | Y | | Y | Y | Y | Y | 6 | 67% |
| | 9. Interviewing other stakeholders | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 10. Questionnaire survey | | | Y | Y | | Y | Y | Y | | 5 | 56% |
| | 11. Explanation before leaving the school. | Y | | Y | Y | Y | | | Y | Y | 6 | 67% |
| | 12. Additional statement from the principal. | | | Y | Y | Y | Y | | Y | | 5 | 56% |

KLC: Keelung City; TP: Taipei County; HC: Hsinchu County; ML: Miaoli County; TC: Taichung County; TN: Tainan County; TNC: Tainan City; KH: Kaohsiung County; KHC: Kaohsiung City.

Under appraisal process, Table 4.3 also shows the twelve steps followed, to some degree or another, by various counties/cities, from the training of appraisers before appraisal to allowing additional statements by principals. However, only three counties/cities conducted such training and observed actual performance, five conducted questionnaire surveys and provided opportunity for additional principal statements. Tainan County had never held orientation meetings for principals but conducted on-site observations and gave feedback before leaving school, while Tainan City had never conducted on-site observation.

4.4.2.3 Outcome treatment

Table 4.4 shows that all counties/cities required that appraisers present appraisal reports, six laying emphasis on both individual and overall school performance and two taking into account only the overall performance of schools. In Tainan City only were individual performance appraisal results used as referents for principal selection. Of course, if appraisal reports are used only for principal selection the possibilities for improving performance and professional development are relatively low. In only two counties/cities were appraisal reports open to the public, in three to stakeholders and two to very important stakeholders, such as the principal, line manager, and appraiser. There was a general presumption that the confidentiality of appraisal reports and appraisal processes should be clearly regulated so as to avoid dispute.

Only two counties, Hsinchu and Maioli, had set up appeal procedures despite the strongly summative purposes of appraisal, involving appraisees' rights and interests and consequent possibility of litigation. Finally, only Kaohsiung

City had set up follow up procedures in its appraisal scheme, the most important step in formative appraisal, prerequisite to improvement. In Taiwan cyclical performance management is still relatively unknown, principal appraisal regarded as a one-off task.

Table 4.4 Outcome treatment of principal appraisal in nine counties/cities

| Counties/cities | | K L C | T P | H C | M L | T C | T N | T N C | K H | K H C | S U m | % |
|---------------------------|--|-------------|--------|--------|--------|--------|--------|-------------|--------|-------------|-------------|------|
| Questions | Items | | | | | | | | | | | |
| Appraisal report | 1. Yes | Y | Y | Y | Y | Y | Y | Y | Y | Y | 9 | 100% |
| | 2. No | | | | | | | | | | | |
| Way of presenting report | 1. Aimed at individuals | | | | | | | Y | | | 1 | 11% |
| | 2. Considered the overall performance of the school | Y | | | | | | | | Y | 2 | 22% |
| | 3. Considered both individual and overall school performance | | Y | Y | Y | Y | Y | | Y | | 6 | 67% |
| Confidentiality of report | 1. Open to public | | | | | Y | | | | Y | 2 | 22% |
| | 2. Only open to stakeholders | Y | | | Y | | | Y | | | 3 | 33% |
| | 3. Being confidential only to important clients | | | | | | Y | | Y | | 2 | 22% |
| | 4. Others | | Y | Y | | | | | | | 2 | 22% |
| Appeal procedure | 1. Appeal procedure | | | Y | Y | | | | | | 2 | 22% |
| | 2. Appeal committee | | | | | | | | | | | |
| | 3. No | Y | Y | | | Y | Y | Y | Y | Y | 7 | 78% |
| Follow up | 1. Yes | | | | | | | | | Y | 1 | 11% |
| | 2. No | Y | Y | Y | Y | Y | Y | Y | Y | | 8 | 89% |

KLC: Keelung City; TP: Taipei County; HC: Hsinchu County; ML: Miaoli County; TC: Taichung County; TN: Tainan County; TNC: Tainan City; KH: Kaohsiung County; KHC: Kaohsiung City.

4.4.3 Effects and comments

There is only one annual performance rating rather than continuous appraisal for primary and junior high school principals in Taiwan, formally introduced after 1999 when it was deemed that incumbent principals should be appraised as the referent for reappointment but the concept of sustained and cyclical performance management has not, as yet, been adopted. Six years later

evident problems have emerged and there is increasing research focus on this topic (see Section 1.1.6). Despite legal requirements, there are still very few complete principal appraisal systems planned or in operation. Some authorities have adopted school evaluation instead but these cannot be taken to reflect the performances of principals. Where appraisal schemes exist they are relatively simple, incomplete and not convincing enough and there is still doubt about using them as the basis for selecting principals (S. Y. Wu, 2003). Indeed, the purposes of those that exist tend to be summative, narrowly focusing on legally required minima, influencing their acceptability to appraisees (Murphy and Rodi, 2000; Nygaard, 1974). Yet, the almost universally accepted purpose of principal appraisal is to lay prime emphasis on professional assistance (Cheng, 2002a; D. Y. Wang, 2004; S. Y. Wu, 2003; Z. R. Wu, 2002); principals needing to feel that they can get useful professional support if they are to willingly submit to scrutiny. Moreover, appraisal is neither continuous nor cyclical, that which focuses only on selection occurring only once every four years, incapable of uncovering principals' problems or assisting in overcoming their shortcomings (Murphy and Rodi, 2000).

There are also problems of personnel and consistency of criteria. Appraisers are still far from professional, who shall do it decided by local governments, for their own schemes. They are neither trained nor well enough informed, readily engendering negative attitudes among principals doubting their objectivity and the accuracy of appraisals. It might be thought that for formative purposes school personnel might usefully participate while external professionals are more appropriate for summative appraisal. Certainly, it appears vital that appraisers should be familiar with principals' work and receive appraisal training (S. Y. Wu, 2003; Z. R. Wu, 2002). S. Y. Wu (2003)

pointed out that principal appraisal indicators and standards are too general and unspecific while job descriptions and professional standards were imprecise. Student performance, school contexts and principals' experiences and abilities tended to be poorly, if at all, indexed, raising a key issue of what proportion of appraisal judgments should be made up of consistent, key rather than local or idiosyncratic indicators (W. S. Huang, 2002). In all cases appraisal time appeared to be too short and rushed. Correct judgments depend on good information. Principal portfolios and observation are neglected, affording appraisers little insight into the actual behaviours of principals and not making up for insufficiency of documentary review, casting a shadow over their fitness for purpose even in one-off appraisal, let alone what would count as adequate should continuous and interactive performance management modes be adopted. Despite claims to the contrary, most counties's/cities' appraisal tools still tend to adopt Likert-style scale, leading to some members of PSCs complaining as to the usefulness of such ratings (Luo, 2000).

Appraisal results hardly provide opportunity for principals to improve their performance, making them of no avail as investment of human resources (Gilbert, 1990) and neglect confidentiality in ways that may be harmful or embarrassing to principals (Joint Committee on Standards for Educational Evaluation, 1988), as well as due process. In most of counties/cities in Taiwan there are no follow-up activities, rather 'accomplishing performance appraisal an end in itself' rather than 'the start of improvement'.

4.5 Summary

Given that principals of primary and junior high schools in Taiwan have long

accepted annual performance rating, reformed in 1999 to require performance appraisals before their service terms expired, providing referents for reappointment, there are still many shortcomings, particularly neglect of continuous professional support for principals, such as would be prerequisite to a reconstructed system devoted to performance improvement.

Comparison of PPM systems in Britain and New Zealand with PPA in Taiwan, it shows the former PPM systems to be more complete. A sound one undertakes a long, developmental journey in a particular political and social context, its deliberately planned focus falling on both appropriate performance and professional development of principals in those contexts. In the next chapter we will turn to explore possible PPM models and their elements as reference points for conducting empirical research in Taiwan.

Chapter Five

Models and Elements of PPM systems

5.1 Introduction

Having explored the concepts and possible theoretical bases of PPM in Chapter Two and Three and attempts to implement versions of it in the UK and New Zealand, as well as under Taiwanese conditions in Chapter Four, it is now appropriate to try to briefly synthesise and analyse a preliminary model aimed at providing a referential framework for formulating an appropriate system for the latter, such as will also serve as part of a process of clarifying the design of the empirical study conducted there in 2005-6 and reported in the next two chapters.

5.2 Models of PPM Systems

We have already seen that the normatively oriented planning literature regards PPM as made up of series of related elements intended to achieve expected objectives through cyclical operation processes with strong emphasis on the nature of purposeful, planned, dynamic, and cyclical and graded performance management. Planners' main purposes should tend to be to assist principals achieve performance objectives and professional development set jointly through negotiation and discussion between managers/advisers and principals. The whole, dynamic process of performance management is generally intended not only to emphasise performance achievement but also to highlight processes of counselling, feedback and support that might be absent or neglected in traditional, top

down appraisal (see Sections 2.2.3 and 2.2.4).

5.2.1 General PM models

The constructions of general PM system models conform to different approaches or models of performance management to which planners and researchers cleave. Of the latter, William (1998) argued that they might be of three types, organisational, employee and integrated. Organisational performance scholars, such as Bredrup (1995), Mabey and Salaman (1995) and Rogers (1990) believed that the main focus of management should be seen as being on the performance of organisations, Bredrup (1995) establishing his PDCA (Plan, Do, Check, and Action) prescription which is represented in Figure 5.1. While not ignoring individuals' self development and supervision, management is seen as a function of organisational performance and standards of performance appraisal are usually taken from competitors, comparative benchmarking, customers, and external audit. Such concepts, focusing on whole school performance, are redolent of Taiwan's centralist PM planning system.

In contrast, other scholars (Ainsworth and Smith, 1993; Guinn, 1987; Schneier, Beatty and Baird, 1987; Torrington and Hall, 1995) have focused their views of performance management mainly on individuals. They divided the operation of PM processes in various ways, which can be synthesised and regarded as concerning planning, supporting, reviewing and outcome treatment stages. Shared decision making between managers and employees is emphasised, objectives are not decided top down and review or appraisal of performance is seen as continuous and cooperative (William, 1998).

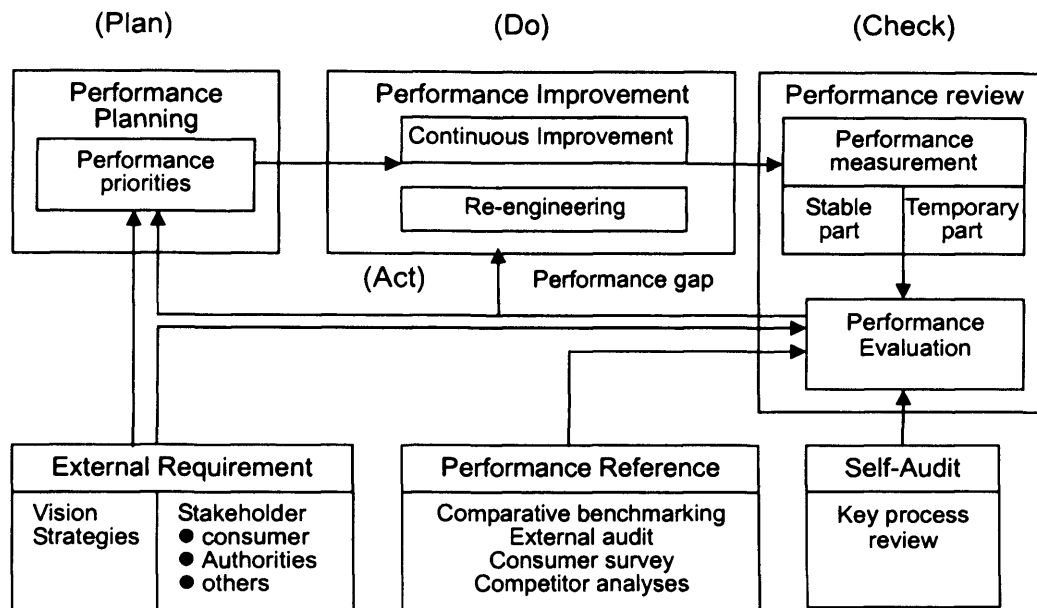


Figure 5.1 Bredrup's organization performance management model

Source: Bredrup, H. (1995). Background for performance management. In A. Rolstadås (ed.), *Performance management: A business process benchmarking approach* (p. 87). London: Chapman and Hall.

Yet other analysts (Armstrong, 2004; McAfee and Champagene, 1993; Spangenberg, 1994; Storey and Sisson, 1993) have believed that performance management should be viewed as a system for integrating individual with organisational objectives. Armstrong (2004) divided operating processes into five stages of role definition, performance agreement, individual development planning, managing performance and performance review, individuals being required to agree on key result areas and capability requirements according to organisational mission or objectives, thereby initiating processes of transforming them into elements of individual performance, developing the wherewithal to deliver them and managing their implementation, review and modification and formal appraisal, as indicated in Figure 5.2.

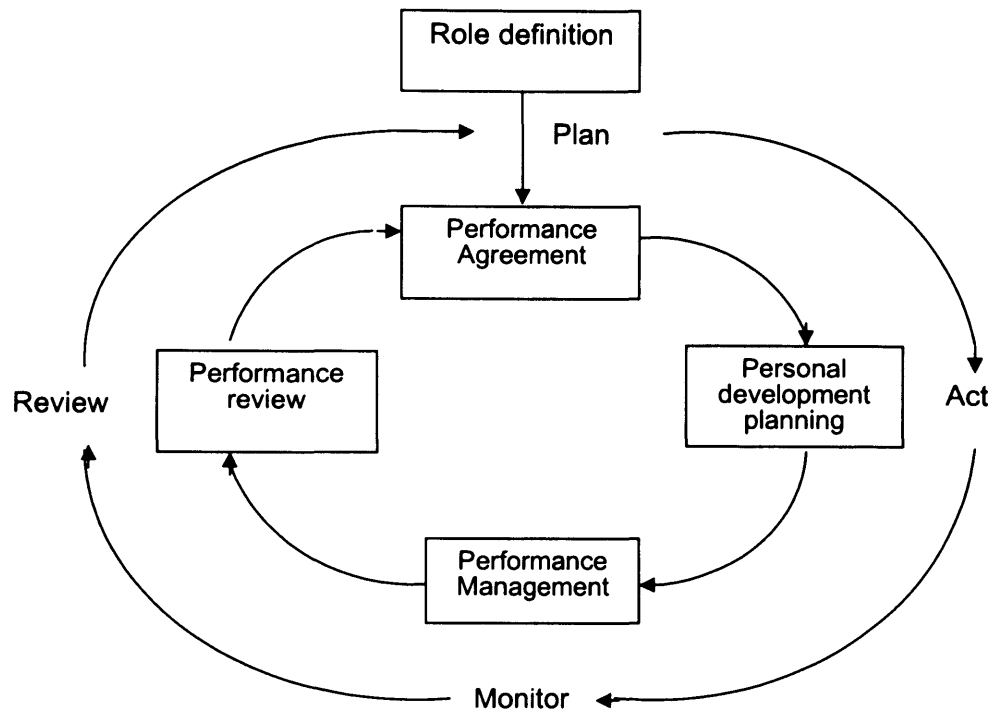


Figure 5.2 Armstrong's integrated performance management system

Source: Armstrong, M. (2004). Performance management: Key strategies and practical guidelines (p.17). London: Kogan Page.

Storey and Sission (1993) similarly divide the PM cycle into five stages of strategy, department, individual, performance and performance-related pay (PRP) objectives, as shown in Figure 5.3.

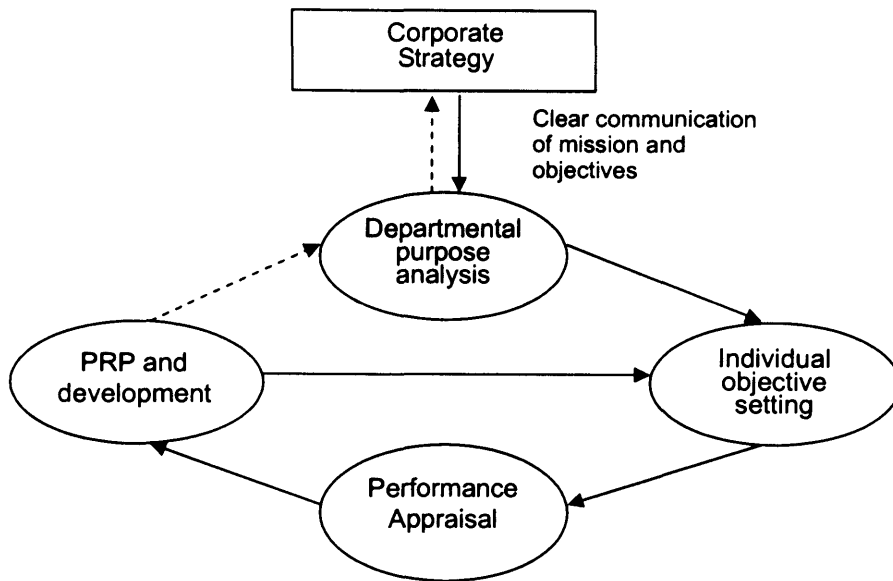


Figure 5.3 Storey and Sisson's integrated performance management system

Source: Storey, J. and Sisson, K. (1993). Managing human resources and industrial relations. Buckingham: Open University Press.

McAfee and Champagne (1993) pictured managers going through three continuous stages of performance planning, management and appraisal to ensure individuals' success in achieving organisational objectives at the standards required, as shown in Figure 5.4.

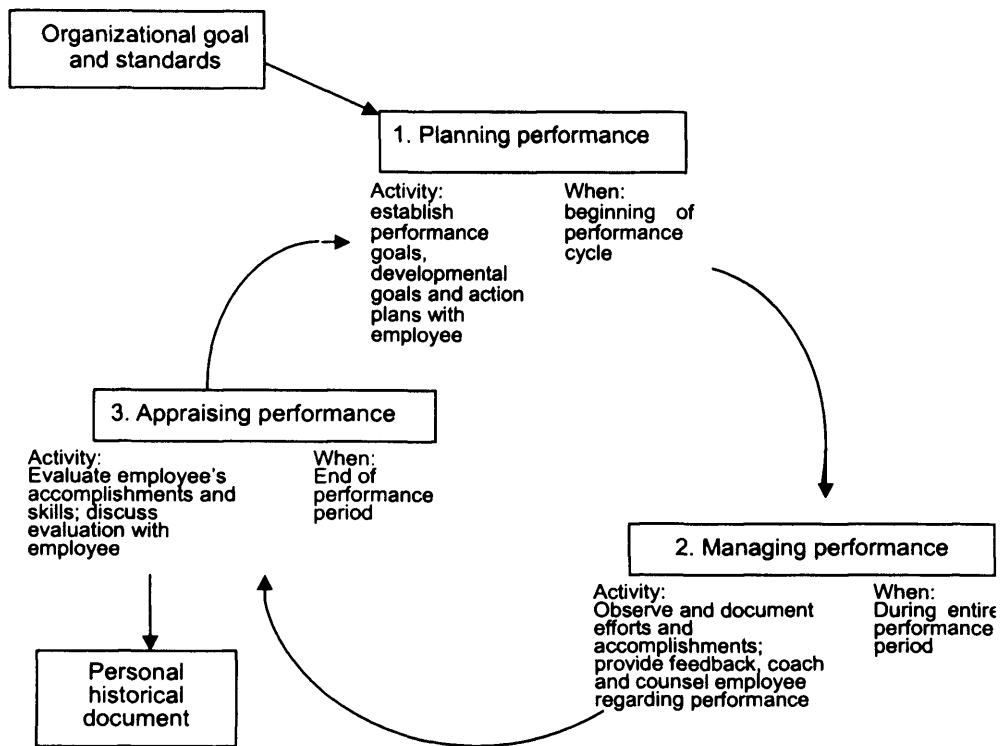


Figure 5.4 McAfee and Champagne's integrated performance management system

Source: McAfee, R. B. and Champagne, P. J. (1993). Performance management: A strategy for improving employee performance and productivity. *Journal of Managerial Psychology*, 8 (5), 24-32.

Spangenberg (1994) combined three performance levels (organisation, process/function and team/individual) with five stages of annual performance cycles (performance planning, design, managing performance, review and reward), as shown in Table 5.1.

Table 5.1 Spangenberg's integrated performance management system

| Level Stage | Organisation Level | Process / Function Level | Team / Individual Level |
|---|---|--|--|
| Performance Planning | <ul style="list-style-type: none"> ● Vision ● Mission ● Strategy ● Organisational goals set and communication | <ul style="list-style-type: none"> ● Goals for key processes linked to organisational and consumer needs | <ul style="list-style-type: none"> ● Team mission, goals, values, and performance strategies defined ● Individual goals, responsibilities, and work plan integrate with process/function goal |
| Performance Design | <ul style="list-style-type: none"> ● Organisation design to ensure structure support strategic | <ul style="list-style-type: none"> ● Process design facilitates efficient goal achievement | <ul style="list-style-type: none"> ● Teams are form to achieve process/function goals ● Job design ensures process requirements reflected in jobs; ● Jobs logically constructed in ergonomically sound environment |
| Managing performance And Improvement | <ul style="list-style-type: none"> ● Continual organisation development and change efforts ● Functional goals (in support of organisational goals) managed, reviewed, and adapted quarterly ● Sufficient resource distribution ● Interfaces between functions managed | <ul style="list-style-type: none"> ● Set up appropriate sub-goal ● Managing process performance ● Regularly review ● Sufficient resource distribution ● Interfaces between process step managed | <ul style="list-style-type: none"> ● Active team-building efforts, feedback, coordination, and adjustment ● Developing individual understanding and skills ● Providing feedback ● Sufficient resource distribution |
| Performance Review | <ul style="list-style-type: none"> ● Annual reviews ● Input into strategic planning | <ul style="list-style-type: none"> ● Annual reviews | <ul style="list-style-type: none"> ● Annual reviews |
| Performance Rewards | <ul style="list-style-type: none"> ● Financial performance of organisation | <ul style="list-style-type: none"> ● Function rewards commensurate with value of organisational performance and function contribution | <ul style="list-style-type: none"> ● Rewards commensurate with value of organisation performance, and: for team - function and team contribution; for individual – function/team performance and individual contribution |

Source: Spangenberg, H. (1994). Understanding and implementing performance management. Cape Town: Juda.

It is evident that across these different types of PM system specifications there are common characteristics. They can all be roughly divided into four cyclical process stages of objective planning, support and feedback, review or appraisal and outcome treatment. In planning individual performance objectives, emphasis is laid on mutual agreement between managers and individuals at the beginning rather than performance review at the end and focus laid on both performance and personal development. Managing performance processes highlights active, mid-term, supportive counselling and feedback between advisers and employees as partners rather than superior to inferior. Performance review or appraisal stresses the annual cycle and is utilised as referent for ongoing improvements and treatments, combining both improvement and accountability. Given these emphases, it is assumed that PM systems can function to integrate whole organisation capacity, focussing on organisational vision and objectives, along with every departments', teams' and individuals' roles and key performance areas to achieve performance objectives and professional capabilities. These are illustrated in Figure 5.5.

| | | | |
|-------------------------------|------|--|--|
| Performance accountability | High | Low development & High accountability (Accountability Orientation) | High development & High Accountability (Performance Management Orientation) |
| | Low | Low development & Low accountability (Non-Performance Management) | High development & Low accountability (Performance development Orientation) |
| | | Low | High |
| | | Performance Development | |

Figure 5.6 Four types of performance management

Source: James, C, and Colebourne, D. (2004). Managing the performance of staff in LEA in Wales: Practice, problems and possibilities (p.62). *Educational Management administration & leadership*, 32 (1), 45-65.

Some researchers (Dill, 1995; Woodhouse, 1995; Popham, 1988; Prebble and Stewart, 1983) have argued that the two purposes of development and accountability can not be combined within one system while other contended they can (Massy, 1995; Vroeijenstijn, 1995; Su, 1997) (see Section 2.4). Principals' professional ability and knowledge may alter with experience and contextual change, such that requirements for professional development and support would alter, while changing schools' environments would properly be reflected in different expectations of their performance. One size could or ought not to fit all; different models for different places would be appropriate. Sergiovanni (1995) and Glickman (1985) adopted the concept of contingency to develop different supervision models encompassing directive, cooperative and non-directive styles for educators at different career, cognitive ability and maturity stages.

Based on the subject of management (self or others) and the purpose of management (development or accountability) possible PPM models can be classified into four types, as in Figure 5.7, though a self accountability-orientated model would be incoherent, leaving self development-orientated, development-orientated, and accountability-orientated modalities. These might be thought of as being capable of flexible adoption according to the needs of planners and principals in different environments, for example: at the advocacy stage of PPM policy or with principals with high autonomy and self-expectations, a self development-orientated model might be appropriate while, as PPM policy is initiated or principals have high of professional development and improvement requirements, a development-orientated model would be suitable and when PPM has been well established or promotion of principal performance is urgently required, an accountability-orientated model or one combining both accountability and development-orientated model would be most apt.

| | | |
|----------------------------|---|---------------------------------------|
| Development-orientation | Self-development orientation management | Development-orientation management |
| Accountability-orientation | X | Accountability-orientation management |
| | Self | Others |

Figure 5.7 Types of PPM models

Under self development principals would conduct PPM themselves according to their own performance and capability requirements, its core operators would be principals, managers/advisers only providing consultation. Such an orientation may originate in humanistic psychology and postmodernist management theories which emphasise that individual values and subjectivity should be respected and the philosophic outlook which hold that individuals possess capacities of self control and management (see Section 3.2.3 and 3.2.5). Moreover, contingency perspectives would tend to suggest that principals who show high performance in managing schools with high autonomy, activity, reflection, self-motivation, recognition-ability and maturity would tend also to possess capacities for self development such that, as long as their manager/advisers gave lead in properly setting annual objectives and standards, they may safely be allowed to opt for such modes. As we have already insinuated, such a PPM model might also be suitable for the advocacy stage of PPM policy, adopted to encourage principals to manage themselves with conscious self-reflection, assisting them to become familiar with and understand PPM concepts and operating processes. A cyclical self development model is showed in Figure 5.8.

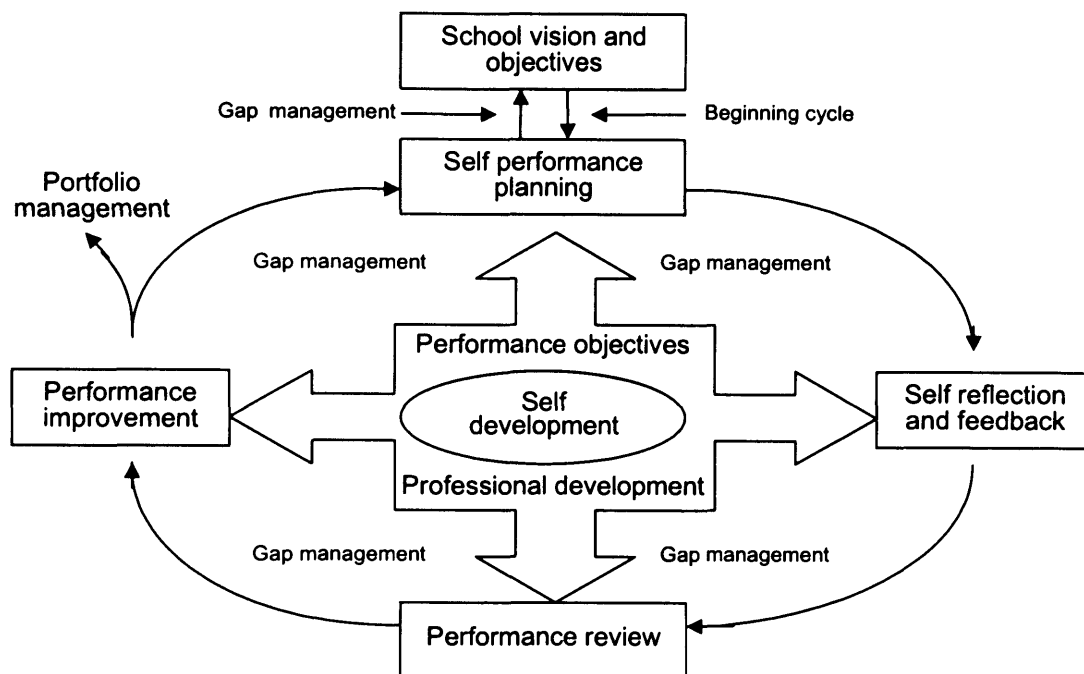


Figure 5.8 Self-development orientation PPM model

Development-orientated PPM systems illustrated in Figure 5.9 will require advisers and principals to arrive consensually at objectives, continuously communicating, reviewing and indulging in feedback to promote and improve management quality. The intellectual impetus behind such a modality may originate from constructivist perspectives and naturalistic paradigms (see 3.2.5). It might be particularly apposite in facilitating principal growth and development, especially while they lack professional ability or experience.

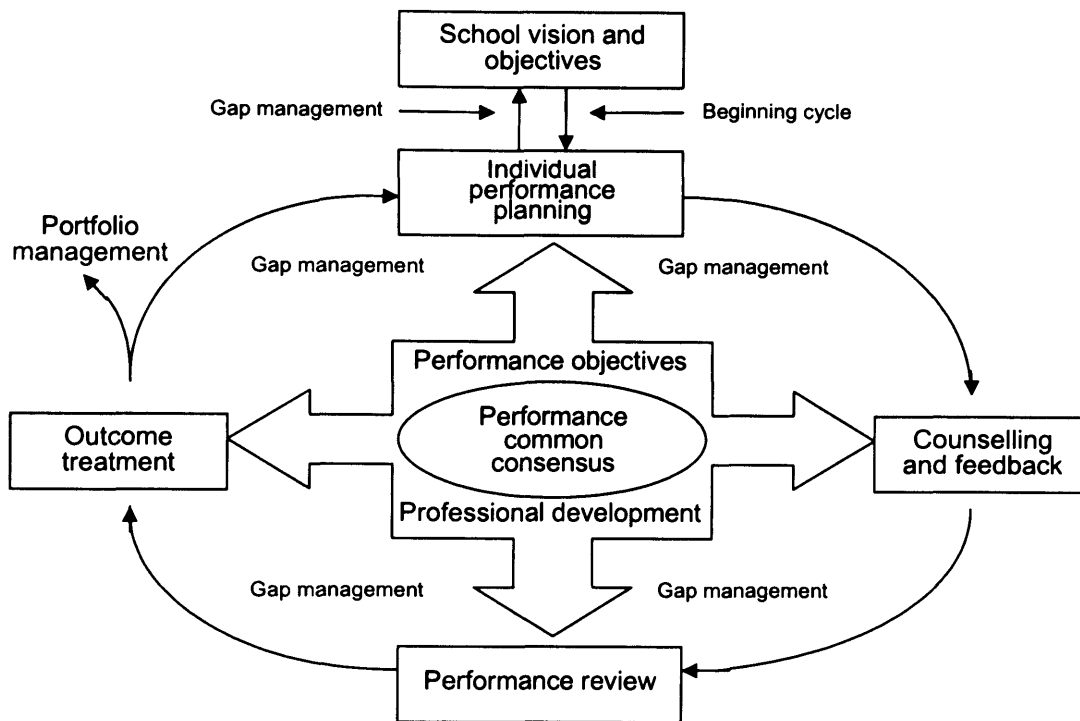


Figure 5.9 Developmental orientation PPM model

Finally, accountability-orientated PPM systems entail management process where performance objectives and standards are set with or without principal participation so as to adjudge achievement expected objectives and provide the basis for pay rises and other rewards and personnel decisions. The rationale behind such a modality might be traced to reinforcement theory perspectives and new public management's emphasise on rewarding favourable behaviour and accounting for responsibilities (see Sections 3.2.1, 3.3.2.3). Given its emphasis on principals' responsibility for performances

agreed or set beforehand, to be appraised as the bases for rewards at the end, finding matching stress on uniform performance objectives, criteria and standards is not unexpected. While its emphasis tends to be on objectivity and accuracy, appraisals' informational base and many of its features may be similar to traditional principal performance rating or appraisal but is not to be simply equated with summative appraisal paying attention only to end results of performance, for it still entails mid-term counselling and feedback processes. When the outcome treatment may be related to pay, rewards, reappointment and other personnel decisions in this model, the appeal mechanism and due process should be concerned.

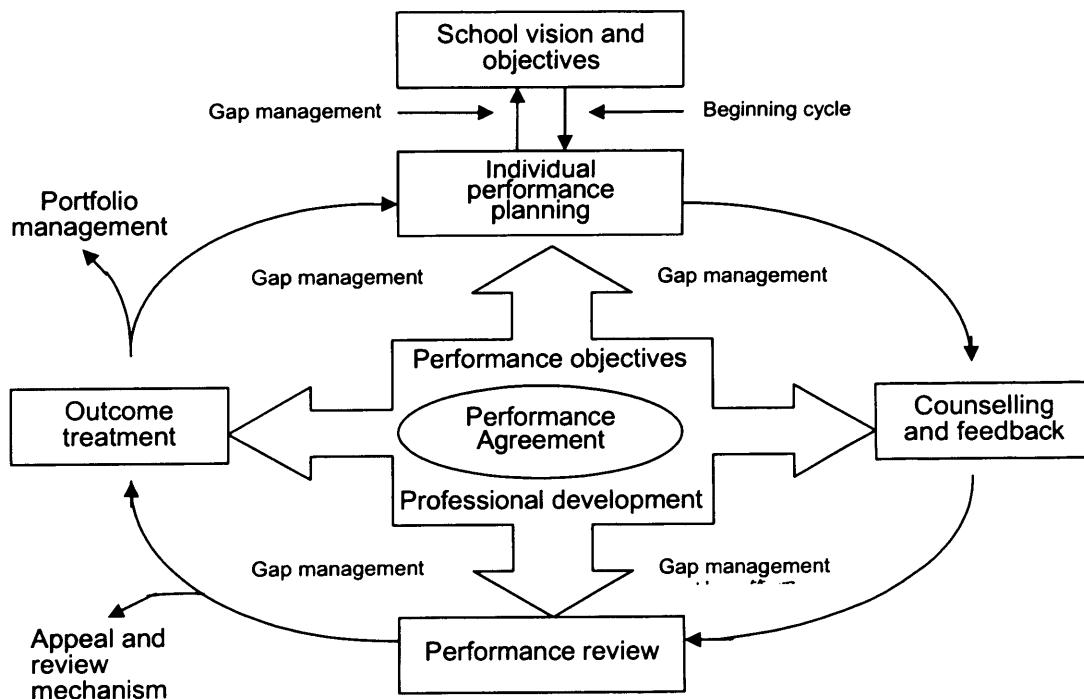


Figure 5.10 Accountability orientation PPM model

5.3 Elements of Three Stages in PPM Systems

The literature suggests that what might be described as 'integrated' PPM systems go through three successive development stages of policy formulation and preparation, operation and outcome treatment.

5.3.1 Policy formulation and preparation

As we saw in our earlier analysis of PPM policy implementation in Britain and New Zealand, their governments have planned and prepared policy objectives and their legitimization, along with key process elements, some of which might be piloted (see Sections 4.2.1). Policy itself is a dynamic and value-laden process through which a political system handles public problems encompassing governments' expressed intentions and official enactments, as well as their consistent patterns of activities and inactivity (Fowler, 2000:9). In short, policy at the level of the state may be regarded as substantive decisions, commitments and actions made by those who hold or affect government positions of authority (Bryson and Crosby, 1992: 63) whose objectives are anticipated results. In a democratic society plural participation in the process of policy planning is generally anticipated where governments allow access to decisions on policy objectives by stakeholders and others. Equally, in such societies, policy contents are expected to go through mandated legislative procedures so as to provide the basis for policy implementation, in the case of PPM, to effect procedures which will directly affect the human rights of principals, usually delegated by central authority to districts or schools, depending on their employment basis.

While policy forecasting may be an important step during policy formulation

(Dunn, 1994; Qiu, 2000) in helping planners to control possible directions and outcomes of policies and at least their initial implementation, the uncertain nature of a variety of factors and the limits of rational analysis usually tends to point to the greater reliability of more or less small-scale pilot schemes as sources of valuable information. There is a process or style of declaring broad policy intentions as preface to using the reactions of stakeholders and others to build the detail of feasible implementation paths of which pilot work – given time and appropriateness - may be a more or less expensive part. Margaret Thatcher and her inheritors in the UK used such tactics with notable success after 1979 (Davies, 1986; 1994). While PPM policy implementation both in Britain and New Zealand went through pilot scheme phases, such procedures are not part of the typical activity of Taiwanese local government authorities.

During PPM systems' operational phases, the quality of professional advisers responsible for or helping school employers (such as governing bodies) in carrying out their duties is held to be critical. Their roles, qualifications, training and certification, deployment and management have all been matters of deliberation and concern in the UK and NZ and insufficiently attended to in Taiwan. While we can see that the main roles advisers play in those PPM schemes is to advise and support governors monitoring and appraising principals to achieve performance objectives, as well as being professional supporters, facilitators, and counsellors for principals, there may be some degree of inherent and possible conflict between them. Being supervisors or employers, interrogators or objective judges in terms of measurable performance imply differently founded relations of power and control to those of professional supporters or critical friends. Schemes lay down necessary or desirable advisory characteristics, capabilities and conditions (DfES, 2003a; 2003b; Rossi, Freeman and Lipsey, 1999; Welsh Assembly Government,

2002) (see Section 4.2.2) and recognise that both sufficient qualification and training and relevant experience are prerequisite to ensuring both advisor expertise and principals' trust in them. In Britain a system of contracting out all the duties of recruitment, training, certification and management of external advisers to a not for profit agency (CEA, now CE) that also offers a wide portfolio of consultancy and training services to teachers, schools and public authorities in the UK and elsewhere, in conjunction with the Department for International Development, is part of the British government's policy of educational marketisation/privatisation, achieving rapid advance in England (Ball, 2006; Tomlinson, 2005), which has ostensibly been successful in providing sufficient manpower for a well planned system that has helped PPM operating processes run smoothly, not least by assuaging some of the inherent antagonisms alluded to above. There are clear questions to be asked of the disjointed 'systems' that currently pertain in Taiwan concerning power and administrative authority, division of roles, costs and so on that arise from the British experience and that elsewhere. Who advisers are and how and where they are deployed and paid are also bound to impact upon PPM operations. In addition, there are choices to be made in terms of their full or part time and specialist/seconded status and experience suggesting, on balance, that part time seconded experts may be best at satisfying the requirements of principals particularly when appraisal modalities are developmental.

Principals' job descriptions that might often be described shorthand as 'comprehensively managing school affairs' cannot offer as much help as they should unless but only where specific tasks and responsibilities are listed provide focus (Waters, 1997). Job analysis would suggest that their duties, tasks, relations, abilities and circumstances all need to be encompassed.

Amstrong (2004) indicated that performance is a function of capability, good performance requiring corresponding capability, both requiring specification in setting annual performance objectives. In turn, professional standards are common specifications representing expectations of government or professional organisations concerning knowledge, technique and moral characteristics that should also be included. All these are, in measure, related to circumstances and tasks and their clarification ought to point to appropriately planned principal professional development.

Whether nation wide principal professional standards which can be referenced in setting annual performance objectives and professional development are apposite is a matter for consideration. For example, in Chapter Four we saw how they have been established in Britain (DfEE, 1998b; DfES, 2004b) and New Zealand (Ministry of Education, 1998a) while in America many professional or principal's groups have also established them, for example, as in the Interstate School Leader Licensure Consortium (ISLLC). Given differing educational administrative systems, professional standards rightly have different emphases. For example, in 1998, the British government asked the Teacher Training Agency (TTA) to develop a set of *National Standards for Headteachers* in order to enhance their professional leadership and management capabilities. Then, as school and principal circumstances changed, these were revised in 2004 (see Section 4.2.1). In Taiwan, more and more attention has been paid to the establishment of professional capability standards in recent years, scholars launching a series of studies. According to Zhang, Wang and Ding (2003), six key domains should be included and Table 5.2 compares these with the six key areas emphasised in Britain, revealing considerable similarity of focus, though Britain leans more toward securing accountability and work with others and policy purpose is centred on students'

achievement, and in Taiwan more on personality and attitudes of principals.

Table 5.2 Principals' professional capability standards, Britain and Taiwan

| British principal standards | Domestic principal's professional development standards |
|--------------------------------------|---|
| shaping the future | school development and appraisal |
| leading learning and teaching | Instruction leadership |
| developing self and work with others | professional development |
| managing the organisation | administration management |
| securing accountability | X |
| strengthening community | school public relationship |
| X | personality and attitudes |

X: It is not identified as a main area.

Researching key areas (KA), referring to the roles principals ought to play or crucial tasks they should lead in or manage, has become something of an avalanche in Taiwan (M. E. Chen, 2003; M. Y. Chen, 2005; Guo, 2001; Hou, Zhang, Lin, Zhu, Liu and Chen, 2000; Hu, 2002; Jiang, 1998; Luo, 2000; Wang, 2000; Z. R. Wu, 2002; Zhan, 2003; Zhang, 1998; Zhang, Wang and Ding, 2003), covering strategic planning, administrative management, curriculum and instructional leadership and requisite aspects of their and characteristically important moral leadership, professional disposition, professional development and public relationships. Most KAs mainly focused on behaviour dimensions, rarely concerning such outcome dimensions as pupil achievements and parent satisfaction.

5.3.2 Operation processes

Since PPM is a cyclical process, duration and time assignment of each of its stages are issues again dependent on purposes. For example, in Britain,

developmentally orientated principal appraisal in 1991 was set on a two-year cycle, in 2000, its more accountability-orientated successor one-year, as in New Zealand. Staging was appropriately planned, then changed, so as to include objective setting, mid-term counselling and feedback, performance appraisal, and outcome treatment. Each of these four operating areas of PPM includes specific tasks. Performance planning may involve key performance areas (KPA) linked to observable key performance indicators (KPIs) according to standards agreed in advance. KPAs are critical missions or objective domains that should be preferentially achieved during performance management, selectively indicated. KPIs, indexed by detailed standards and differently weighed, transform KPAs into more specific, observable, or quantifiable behaviours or results expected of appraisal systems for principal performance. Objectives set will have particular sources, be of particular types and have underpinning objectives. It is generally held that the former ought to be linked to school development objectives, as well as other aspects of principals' job descriptions, KPAs and professional standards. Some will relate to concrete outcomes others to less quantifiable aspects of leadership and management behaviour.

According to Locke (1968, 1996) objective setting should be explicit, challenging, reachable, and acceptable to all parties, its principles adopted using some device, such as Twin-SMART. These encompass the properties, processes and values of objectives (Amstrong, 2004; Wesh Assembly Government, 2002; William 1998) of which specificity, measurability, achievability, relevance and time-relatedness should be the hallmark of the former, while the latter two ought to be stimulating, meaningful, agreed, responsive and subject to teamwork, thus ensuring the forward-looking character of performance management.

Hewton and West (1992) and Mercer (1996) thought that the isolation of principals' roles ought to be assuaged by positive professional support and feedback. It is argued that the most critical benefit of appraisal for the individual is to create opportunity for dialogue about performance based on observation and reflection on practice and receiving feedback (Middlewood and cardno, 2001). Under PPM systems cast in this image, interaction concerning counselling and feedback should be more frequent than in traditional appraisal, to be determined by both advisers and principals considering the latter's actual needs and resources and PPM purposes. In respect of counselling, principals are encouraged or expected to create personal portfolios in order to discuss and share related problems with their advisers. Brown and Irby (1997) argued that principal portfolios were documents deliberately selected and collected together to demonstrate personal experiences and leadership, capable of adoption for both professional and career development and appraisal, including self-reflections, others' feedback, critical accident records, evidence related to the KPI and even formal and informal feedback gathered from advisers.

People may have different explanations of the occurrence or results of events. Such explanation and attribution may affect one's thinking, emotions and successive behaviours (Weiner, 1974, 1980, 1986). Thus, advisers and principals may have different explanations or attributions of expectations of objectives and actual performances. Conflicting attributions will tend to make solutions of problems in performance management difficult, highlighting the vital function of trust in sharing opinions and the importance of creating a climate of trust during the operation process (Middlewood, 2002; West-Burnham, 2001). In terms of the concept of the Johari window (Luft,

1984), there may be three obstacles to communication and feedback between advisers and principals outside the 'open area' known by both: a 'hidden area' known by principals but not advisers; a 'blind area' unknown by principals but known by advisers; and an 'unknown area' known by neither side. As to those hidden, principals will tend only to want to release problems if their relationships with advisers are good and trustful. Sometimes, blind area problems are about principals' personal habits which, if technical, may be relatively easily raised immediately, otherwise requiring extra care so as to avoid aversion. As for the 'unknown area', advisers and principals may need to collect feedback from multiple sources to uncover latent problems and seek for improvement.

Performance appraisal procedures are workflows that best follow three steps: an initial meeting, unobtrusive on-site data collection and formal review meeting, modes of principal self-appraisal differ more across systems. Appraisers may choose a variety of methods of data collection, including documentary review, on-site observation, questionnaires and interviews, in light of the requirements of indicators and standards. Some auxiliary instruments may also be used, such as video and audio recording, written records, checklists and rating scales, hopefully appropriately based on KPIs and standards already planned. With respect of self-appraisal, for example, in Britain, prior to the start of formal review meetings, heads may opt to complete self-appraisal forms and include them in the files submitted to advisers before formal appraisal (DfES, 2003b). In Alabama State, USA an optional self-appraisal is also embraced in the *Principal evaluation System* (Morton, 2002) but not considered in deriving scores in formal evaluation process and may not be shared at the conclusion of the appraisal process until agreed between principals and appraisers. In Taiwan self-appraisal is usually

included and revealed to appraisers prior to the start of the formal process and is available as datum for their deliberation. While in Britain and New Zealand PPM policies emphasise respect and confidentiality so as to avoid possible negative impact on principals, our data reveals that practices in some Taiwanese local authorities leave something to be desired (see Section 4.4.2.3).

Increasingly data may be collected from stakeholders who interact with principals in the course of their jobs in the hope of getting at their 'real' behaviours more completely. Some researchers (Z. Y. Guo, 2004; Visscher and Coe, 2003; Wu and Chang, 2004; S. F. Xie, 2003; Y. Z. Yan, 2003) have argued that '360 degree' or multiple resources feedback techniques have been increasingly adopted in the hope of providing schools and individuals with more complete information for improvement, for example from superiors, peers, staffs, parents, community and students. Issues of sufficient confidentiality subjectivity and scruple, mingle with unwillingness to frank about 'the boss', especially in Taiwanese cultural background where the Chinese sensibility is emphasised (Wu and Chang, 2004). People tend to be reserved about negative, upward feedback that might result in retaliation, particularly when feedback data is used for purposes of reward or punishment, Weber long ago observing that bad news moved upward only with difficulty through bureaucratic systems.

Post-appraisal review meeting generate performance reports, with or without principals' notes of dissent, as formal records of agreed decisions reached in the review meeting. The common defects of such reports in PPA in Taiwan is their complexity, abstractness and rather obscurantist technical jargon where clarity as to context, performance, achievement, problems, priorities and

future schedules should rule (Cheng, 2002c). Access to them is regulated rather differently by each PPA policy. (see Section 4.4.2.3)

Awareness of attribution theory alerts us to the fact that individuals often tend to explain their or others' behaviours incorrectly because of perceptual bias or attribution error and such impact on the results of appraisal should be controlled (Cheng, 2002c; Schuier, 1995). Principal appraisal may be subject to halo or horn effects or stereotyping. Appraisers unaware of the actual performances of principals or who do not want to offend usually tend to rate them middle of scale, others may be abnormally strict or lenient or give undue weight to particular or recent performances. Other appraisers may give high scores to principals who share their views, while some may even ignore some defects in order to cover up their own. The possibility that appraisal will fall short of objectivity and accuracy is by no means confined to judging principals but does constitute the rationale for establishing specific criteria or indicators for each key performance dimension and requiring trained appraisers to rate them separately.

5.3.3 Outcome treatment

If the core spirit of PPM systems is held to be helping principals to establish and achieve expected objectives through enhanced professional ability and performance, review should attend to the latter as much as establishing whether objectives have been achieved. Rational linkage to reward and complaint/appeal systems would form part of the same ethos. Indeed, performance improvement involving analysis or diagnosis of problems and professional development to enhance the capabilities required by the principal ought to be viewed as a seamless garment in PPM systems that are both task

and person-focused. Currently in Taiwan, professional development may take place in colleges and universities through advanced studies and in-service professional courses aimed at specific techniques (such as IT, communication and marketing skills) in the fields of professional leadership and management; training organisations in local counties; the CPD Alliance which can tailor-make arrangements across adjacent counties; learning groups established by principals themselves, planned as workshops for sharing practical experience or assisted by invited scholars and specialists and paid for either out of local government or school budgets; and non-governmental training organisations to whom governments may consign the training or other functions, such as characterise provision in other countries, for example in respect of some professional certification systems or national principal development centre or colleges, either university related or not, possibly concentrating on principal networking and E-learning programmes

Annual performance rating of principals has, as we have noted (see Section 4.4), been a routine activity in Taiwan since 1945, not only short on concepts of the performance management but full of bureaucracy and formalism. Introducing PPM would entail annual performance agreements, continuous counselling and feedback through much clearer, actual, and accurate procedures than those involved in mere annual rating, involving long-term systematic data collection, analysis and judgment. Whose outcomes can be utilised for or linked to more valid and reliable ratings and the rewards that flow from them. There are two complementary aspects of motivation, intrinsic and extrinsic, cognitive theories privileging the former, behaviouristic the latter (see Sections 3.2.1, 3.2.2). Extrinsic incentives may have an immediate and powerful effect but may not necessarily be long-lasting, while recognition and praise outweighs threats and criticism (Tomlinson, 2000). Robbins (2002)

argued that if employees perceive that their efforts are accurately appraised and the rewards they value are closely linked to their appraisals, management will have optimised their motivational properties. Although performance related pay (PRP) may be practically used to encourage employees to enhance their performance, some studies doubt its effectiveness as a motivational mechanism (Cutler and Waine, 1999) and show it to have side effects, such as purposely hiding defects and intent to focus on specified objectives but neglecting others (Chamberlin, Wragg, Haynes, and Wragg, 2002). For such reasons, its design and implementation should seek to avoid such negative effects (Amstrong, 2004). There are several feasible forms of performance rewards which might be considered in a PPM system in Taiwan where the payment of the principals can be divided into five kinds: base salaries, academic research allowance, position allowance, performance rating bonuses and year-end bonuses. These could range from cash bonuses for effective achievement or outstanding progress, increasing their academic research element to increasing their basic salaries. The academic research allowance for primary and junior high school principals is at the same level as that of university lecturers. The starting point and highest basic salary level on the pay spine for principals is determined by their academic background and it is impossible to increase them without masters' or doctors' degrees, though the salary of those with them has kept increasing over the years. It should be possible, both when principals' backgrounds, experience and performance have reached a certain level, to increase their academic research allowance at least to the level of assistant professor and to introduce a threshold assessment, as in Britain, so that those who have reached pre-set seniority or performance can be promoted to a higher pay spine structure if they meet agreed standards, in order to encourage their efforts. Moreover, there is no principal classification system or linkage with principal payment by school size.

PPM policy, well planned, could be the vehicle for introducing grades of advanced or consultant principal alongside general principals and allowance for school size on a further range of pay spines. Honour awards, wholly intrinsic in character, also may be given publicly by government, such as the recently introduced *Superexcellent Contribution Award*. Current principal appraisals in Taiwan are summative, aimed at selection, paying scant attention to school differentials or contexts, engendering anxiety and window-dressing, having lost accuracy and value (Cheng, 2002c), while a well planned PPM system could secure change on an appropriately individualised basis (see Section 2.5.1) which should also ensure substantive and procedural due process in protecting legal rights and benefits of principals (Stufflebeam and Pullin, 1998).

5.4 Summary

Every system has its defects and the very meaning of PPM systems involves the reaching of common cause or consensus between adviser/appraiser and principal/appraisee with respect of at least some of the inherent or difficult to remove antagonisms, even contradictions and limits to which we have adverted at many points here and in other chapters. Normative conceptions of systematic performance management would require a perfect plan and control of all elements in its operation process to ensure smooth conduct and full influence. Neither common experience nor social science knows of such a world. In intertwining, as has been attempted here, a distillation of the character of PPM models with features of real erstwhile, current and emerging systems, nothing is more obvious than that we are dealing with complex meetings of official intentions, cultural values, and pedagogic manners and the ownership and control of occupational professional orders. These are not

social entities likely to lay down their interests lightly except in favour or practices that they both understand and find enhancing. Finding the mutuality in the latter may be better understood if we clarify the particularities of each. It is to investigation of Taiwanese principals' and educational administrators' conceptions of these issues that we now turn.

Chapter Six

Research Design and Methodology

6.1 Introduction

The purpose of this study is to formulate a feasible PPM system for Taiwan by way of literature review and empirical research. The former has been explored in Chapters Two to Four and the possible elements of a model synthesised and discussed in Chapter Five. Empirical research employing a mixed-method design was focused upon stakeholders, mainly policy makers (educational administrators) and principals of primary and junior high schools in Taiwan between January 2005 and February 2006. In pursuit of answers to Question 5, Section 1.3 the research design and methodology adumbrated below were employed. They will be discussed in five parts: the empirical research questions; research design and research framework; description of the questionnaire survey, including population and sample, design of the instrument, validity and reliability and methods of data analysis; discussion of interviews, following the same logic; and ethical considerations in this study, followed by a summary.

6.2 Research Questions

The following questions were examined:

1. What were participants' views as to the need for of a PPM system?

Items included: Do principals experience professional isolation because of

lack of good mentors or friends? Do they need continuous professional support during their career? How is it necessary to establish a sound PPM system to replace current principal appraisal?

2. What were participants' views as to forming a good PPM system? Items included: What should be the main purpose of PPM? How long should appraisal cycles last? How should advisers be recruited, trained and managed? Is it necessary to establish professional principal standards in Taiwan? What constitute important key performance areas for principals? How should appraisal standards of principal performance be set? How should data collection methods and tools of principal performance be prepared? What ancillary measures or preparatory work should take place before implementing a PPM system?

3. What were participants' views concerning PPM operating processes? Items included: How should annual performance objectives be set? Was it necessary for principals to sign performance agreements for their four-year terms with local education authorities? How should PPM counselling and feedback be increased or improved? How should principal performance be appraised? How should review meetings be held? How should appraisal reports be made and dealt with? How should confidentiality and due process be treated in PPM systems?

4. What were participants' views concerning dealing with performance outcomes in PPM? Items concerned: How should shortcomings in principal performance be handled? How should the professional development of principals be planned and established? How should principal rewards be planned? How should performance outcomes be utilised in principal selection?

How should resources be provided for helping principals improve their performance?

6.3 Research Design and Framework

6.3.1 Research design

Patton (1990:187) indicated that triangulation or combination of methodologies in a study of the same phenomena or programme is an important way to strengthen study design. Denzin (1978) identified four basic types of triangulation: data triangulation, using a variety of data sources in a study; investigator triangulation, using several different researchers in a study; theory triangulation, using multiple perspectives to interpret a single set of data; and methodological triangulation, using multiple methods to study the same problem in a study. The research method chosen for this empirical study is a mixed method employing a methodological triangulation strategy, combining both quantitative and qualitative methods to investigate the same phenomena in a single project (Creswell, 2003; Denzin, 1978; Tashakkori and Teddlie, 1998). Tashakkori and Teddlie (1998) contended that methodological triangulation breaks the hegemony of mono-method purists and allows researchers to fully collect and explain their data by overcoming the inherent limitations of particular data collection methods. While quantitative research methods may be used to collect large amounts of data for analysis, they can not fully explore all research questions or provide more than a brief glimpse of individual intentions (Best and Kahn, 1993). Qualitative research methods, on the other hand, may allow researchers to more fully explore such questions, to provide better rounded detail that may be more richly interpreted, though

usually at cost of researcher time and sample size, more limited scope and lower generalisability.

The logic of mixed methods is based on a pragmatist worldview (Creswell and Clark, 2007; Tashkkori and Teddlie, 1998), which rejects the either-or of the incompatibility thesis between positivism and constructivism, embracing both points of view (Tashkkori and Teddlie, 1998: 23). While its research focus is on the consequences of research, the concepts of problem-centred and multiple methods of data collection are adopted. Thus it is pluralistic and oriented toward 'what works' and practice (Creswell and Clark, 2007: 23).

The specific mixed method design chosen for this empirical research is referred to by Creswell (2003) as a sequential explanatory strategy in a dominant-less dominant design, where quantitative data is first gathered and analysed by questionnaire survey, followed by collection and analysis of qualitative data by interview. Both methods are compared and integrated during the interpretation phase of the study. The purpose of such a sequential explanatory design is to use qualitative results to assist in explaining and interpreting the findings of primarily quantitative data (Creswell, 2003: 215). The reason why both questionnaire survey and interview are chosen is that use of the former enables simultaneous collection of a large number of data (Fraenkel and Wallen, 2003), permitting insight into the perspectives of a majority of stakeholders with respect of our research questions, while the latter affords an abundance of information from subsequently selected key participants (Kvale, 1996) to assist in cross-validating, complementing interpretation of prior questionnaire findings, assisting in answering not only questions of 'what/how?' but also 'why?'.

6.3.2 Research framework

The participants selected in this study were educational administrators who would be in charge of PPM policy making and principals likely to future participants. The research framework is represented in Figure 6.1 and relates to the main elements of three stages integral to forming a PPM system, encompassing eight issues at the policy planning and design stage, including why it might be required, its purposes, determining advisory functions, setting professional standards, delineating key performance areas and appraisal standards, preparing methods and tools of data collection and guidance and explanatory meetings and other ancillary measures. Seven issues were to be discussed concerning implementation, including performance agreements, objectives, counselling and feedback, appraisal, review meetings and report, including due process and confidentiality. In the outcome treatment stage, five issues were encompassed: setting improvement objectives, professional development, performance rewards, principal selection, and improvement resources. Their content was determined by review and synthesis of the literature and the current state of Taiwanese head teacher management presented in the foregoing chapters.

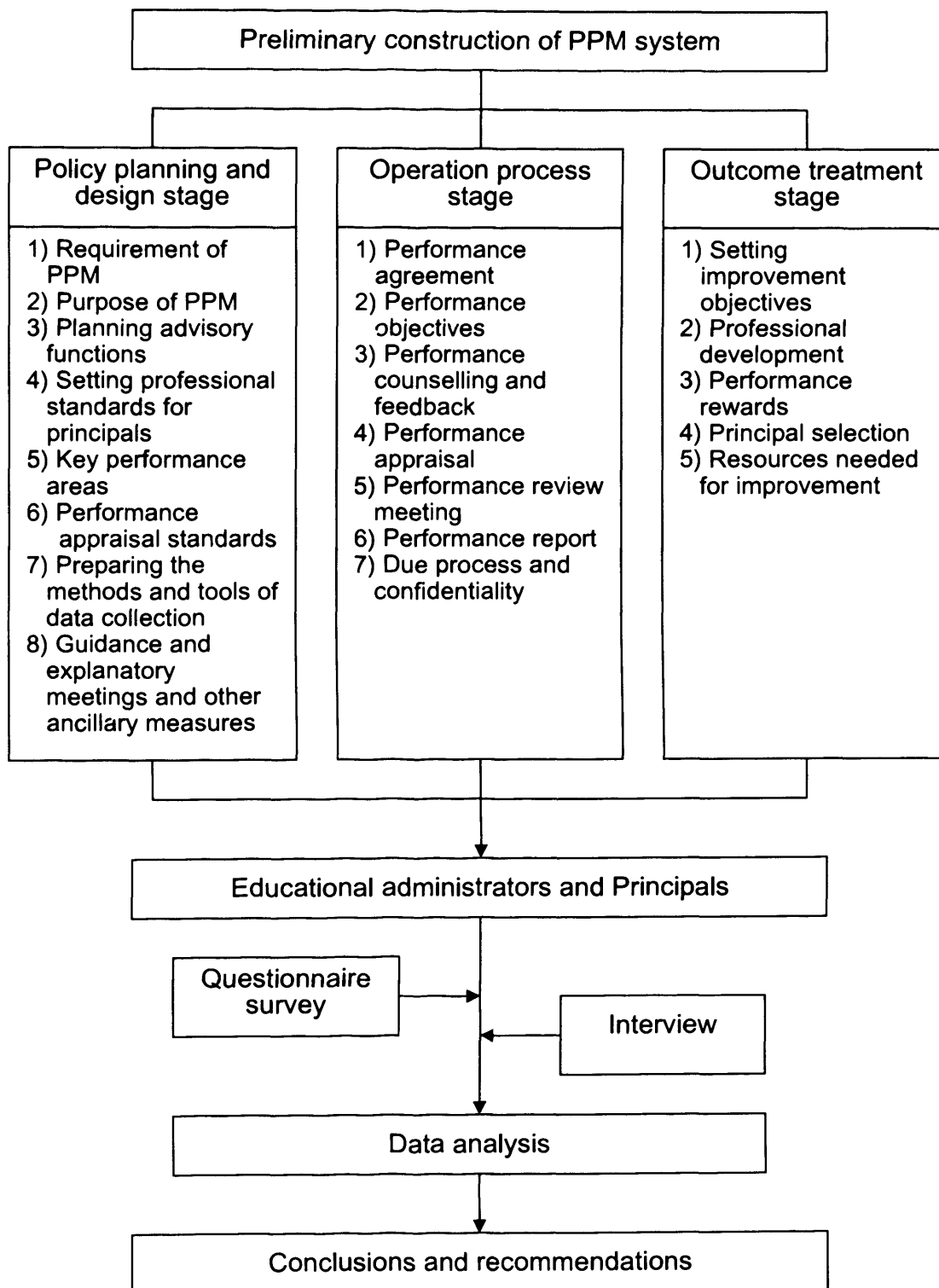


Figure 6.1 Research framework of formulating a PPM system

6.4 Questionnaire Survey

6.4.1 Population and sample

In Taiwan, public primary and junior high schools are managed by a Bureau of Education (BOE) in each local government area. The Ministry of Education (MOE) is mainly responsible for making national educational policies and supervising the extent to which they are implemented by local government in terms of their statutory obligations. The stakeholders in formulating PPM policies are potentially those policy makers who work in MOE and BOEs and public school principals of primary and junior high schools subject to them in the twenty three counties/cities in Taiwan.

Two sampling methods were used in this study: systematic sampling with a random start for identifying principals; and purposive sampling for choosing educational administrators. Babbie (1998:214) indicated that 'systematic sampling is virtually identical to simple random sampling, if the population list is, indeed, randomised before sampling'. Fraenkel and Wallen (2003:103) also indicated that if the arrangement of population on the list is randomly ordered or is not in some sort of cyclical pattern that accidentally coincides with the sampling interval (periodical sampling interval), a systematic sample drawn from the list is a random sample. The sampling method which I used for selecting principals was 'systematic with a random start', not only easily conducted, but also coming to much the same thing as stratified sampling of schools of counties/cities because the initial list of principals was arranged in random order. The *List of Primary Schools and Junior High Schools* published by Ministry of Education (2004) provided its basis. It is arranged in accordance with the time order in which schools were established in every

county/city, respectively. Although the larger samples, the more likely they are to represent the population, they are, in practice, limited by the time, energy and other resources of researchers. Thus, the size of sample of principals determined upon in this study was one ninth (11%), following the guidelines of Fraenkel and Wallen (2003: 106) that 'a sample should be as large as the researcher can obtain with a reasonable expenditure of time and energy' and with a minimum number of 100 in descriptive studies (p.109) and, as Gay (1992) indicated, with a minimum of 10% of the population. Therefore, the sampling interval was every ninth principal on the list. The total number of principals selected was 367, 79 from junior high schools and 288 from primary schools (see Table 6.1).

The sampling method used in selecting educational administrators was purposive. Babbie (1998) indicated that purposive sampling may be appropriate when based on previous knowledge of a population relevant to the specific purpose of research or when the names of the population cannot be established so as to conduct random sampling. A list of section chiefs and inspectors in 23 counties/cities could not be established so as to make random sampling possible. However, in this study, my previous four years experience as director of a BOE in Taiwan made me aware of who would be the key policy makers of PPM systems, so that there were two steps in conducting purposive sampling. I determined the first step on the basis of my prior, professional knowledge, selecting each BOE director, deputy director and section chief mainly responsible for principal and school appraisal in each local area, plus six key persons in the MOE appointed as core policy makers in formulating a PPM system. This step gave 75 ($3 \times 23 + 6$) individuals. The second step was remitted to the twenty three BOE directors who were asked to select three other section chiefs or inspectors in their authority who may

have been in charge of or were experienced in principal appraisal/school evaluation. These were, importantly, individuals whose opinions were likely to be considered when PPM policies were discussed as part of the agenda at periodic Bureau meetings. In order to assure that the sample size appropriately reflected opinion across counties/cities, 69 individuals were selected (3×23), bringing the total sample of educational administrators in this study to 144 (75+69). The populations and the final samples of both administrators and principals chosen for questionnaire survey are shown in Table 6.1.

Table 6.1 Educational administrator and principal populations and samples for the questionnaire survey

| Objects | Educational administration | Junior high school principals | Primary principals | Total |
|---------------------|----------------------------|---|--------------------|--------|
| Method of sampling | Purposive sampling | Systematic sampling with a random start | | |
| Population | 286 | 715 | 2598 | 3599 |
| Samples | 144 | 79 | 288 | 511 |
| Sampling percentage | 50.35% | 11.04% | 11.08% | 14.20% |

Questionnaires with attached stamped addressed envelopes were sent by mail directly to participating individuals, as advocated by Babbie (1998), in January 2005. Given that it is critical in mailed survey research to obtain a high percentage of returned questionnaires (Altshunld and Lowers, 1984), follow-up telephone calls were made to directors of BOEs and principals who had not made a return two weeks after the original mailing to encourage their participation and in the hope of increasing return rates. One month later, total returns were 392, of which 113 were educational administrators (28%), 72

junior high school principals (18.4%) and 207 primary school principals (52%). Response rates by category were 78% of educational administrators, 91.14% of junior high school principals and 71.88% of primary school principals, giving a 76.71% total average response (see Table 6.2). Given that some scholars (Babbie, 1998; McMillan and Schumacher, 2001) have argued that a response rate of 60% is acceptable/good and 70% or over is very good, the rate in this study may regard as highly acceptable. After completed questionnaires were returned, they were opened, scanned, assigned an identification number and coded on SPSS 12.0 Software.

Table 6.2 Questionnaires returns, by respondent category

| Objects | Educational administration | Junior high school principals | Primary principals | Total |
|--------------------------|----------------------------|-------------------------------|--------------------|---------------|
| | N | N | N | N |
| Samples | 144 | 79 | 288 | 511 |
| Returned (% of total) | 113 (28.8%) | 72 (18.4%) | 207 (52.8) | 392 (100%) |
| Response rate | 78.47% | 91.14% | 71.88% | 76.71% |

6.4.2 Questionnaire design

Since no survey instrument existed that could serve the purposes of this study, an original one was developed, hopefully fit for its purposes, drawing upon the literature review and personal, practical experience. It was divided into three parts corresponding to the stages of instating a PPM, covering twenty issues over fifty three questions (see Table 6.3).

Table 6.3 Questionnaire stages, issues and questions

| Stages | QN | Issues | QN | Question |
|---------------------------|----|--|----|------------|
| Planning and design stage | 19 | requirement of PPM | 3 | Q1 to Q3 |
| | | purpose of PPM | 1 | Q4 |
| | | planning advisers | 9 | Q5 to Q13 |
| | | setting professional standards for principals | 1 | Q14 |
| | | key performance areas | 1 | Q15 |
| | | performance appraisal standards | 2 | Q16, Q17 |
| | | preparing methods and tools of data collection | 1 | Q18 |
| | | guidance and explanatory meetings | 1 | Q19 |
| Implementation stage | 27 | performance agreement | 1 | Q20 |
| | | setting performance objectives | 8 | Q21 to Q28 |
| | | performance counselling and feedback | 6 | Q29 to Q34 |
| | | performance appraisal | 3 | Q35 to Q37 |
| | | performance review meeting | 1 | Q38 |
| | | performance appraisal report | 3 | Q39 to Q41 |
| | | due process and confidentiality | 5 | Q42 to Q46 |
| Outcome treatment stage | 7 | setting improvement objectives | 1 | Q47 |
| | | professional development | 2 | Q48, Q49 |
| | | performance rewards | 2 | Q50, Q51 |
| | | principal selection | 1 | Q52 |
| | | resources needed for improvement | 1 | Q53 |
| Sum | 53 | 20 | 53 | |

Coverage of the planning and design stage encompassed eight and nineteen questions (see Appendix A for the full instrument), three concerning why a PPM might be required (Q1 to Q3), one question as to its purposes (Q4), nine on the qualifications, employment and management of advisers (Q5 to Q13), one on professional standards for principals (Q14), one question on key performance areas (Q15), two on performance appraisal standards (Q16 to Q17), one question preparing methods and tools of data collection (Q18), and one question on guidance and explanatory meetings (Q19).

The implementation stage comprised seven issues and twenty seven questions, one question for performance agreements (Q20), eight for performance objectives (Q21 to Q28), six for performance counselling and feedback (Q29 to Q34), three for performance appraisal (Q35 to Q37), one for review meetings (Q38), three for performance reports (Q39 to Q41) and five concerning due process and confidentiality (Q42 to 46).

The outcome treatment stage included five issues and seven questions, one on setting improvement objectives (Q47), two questions about professional development (Q48 to Q49), two questions concerning performance rewards (Q50 to Q51), one on principal selection (Q52) and one on resources needed for improvement (Q53).

Except for Q9, Q10, Q13, Q24, and Q 27 items were designed as categorical variables, the others employing a Likert-type scale asking respondents to express their degree of agreement/disagreement with each question on response scales consisting of four options from 'strongly disagree', 'disagree', 'agree' and 'strongly agree' and a score correspondingly assigned to each response of 1, 2, 3 or 4, higher scores indicating greater agreement.

6.4.3 Validity and reliability

Given that validity and reliability are important criteria in establishing and assessing the quality of quantitative data (Bryman, 2001:270) an expert panel was selected to assess the content validity of items after the preliminary version was designed. The purpose of content validity is to evaluate whether items accurately measure what they are intended to measure (Creswell, 2003:

157). The expert panel of fifteen included six university professors of educational administration (three with experience of educational administrative settings), three Education Bureau administrators, three primary school principals and three junior high school principals with at least four years experience in current posts and having been involved at least two years in principal appraisal or school evaluation. Each member of the panel was asked to assess the extent to which every item seemed capable of accurately measuring the content it was ostensibly expected to measure using a Questionnaire of Expert Content Validity in which three level options followed each question to be assessed: 'adequate', 'adequate if revised as suggested', or 'inadequate'. If 'adequate if revised as suggested' was chosen panel members were requested to provide a clear recommendation for doing so. The questionnaire was sent to each panel member with an addressed and stamped return envelope and a gift expressing gratitude for their assistance. They were all returned within two weeks with no 'inadequate' responses but some suggestions for revision. Items were revised in the light of these and prepared for pilot study. The analysis of results of expert panel is showed in Appendix B.

Reliability is fundamentally concerned with issues of the consistency of measures (Bryman, 2001: 70). In order to estimate the reliability of items, a pilot test was conducted using test-retest methods with a sample of forty five consisting of 27 primary school principals and 9 junior high school principals chosen at random from three counties/cities and 9 educational administrators purposively sampled using the same procedures as those outlined in Section 6.4. All were asked to complete this questionnaire and consent to assessment of test-retest reliability two week after its questionnaire. Thirty eight participants (84%) completed this exercise and reliability coefficients were

calculated for each item, except those involving categorical variables (Q9, Q10, Q13, Q24, and Q27), ranking from .71 to .87. Franekel and Wallen (2003:168) indicated that for the purpose of research such as ours reliability should be at least .70 and preferably higher, so that the questionnaire might be deemed to have reached acceptable levels.

6.4.4 Methods of data analysis

Quantitative data in this study was coded and analysed using SPSS Windows 12.0 software so as to produce:

1. frequencies and percentages used to calculate expert panel content validity by for each item;
2. Pearson correlation coefficients to calculate the reliability coefficient of the questionnaire;
3. means and one-sample T tests to describe the extent to which respondents agreed on questions involving a Likert-type scale and percentages to delineate response to questions involving categorical variables;
4. General Linear Model (GLM) - Repeated Measures to compare average differences between different items of questions which have multiple elements;
5. One-Way Analysis of Variables (One-way ANOVA) to compare response difference between those in different current posts on questions involving Likert-type scales. Given that groups being compared in the study were of different size and Scheffé's Test is less sensitive to departures from normality and assumptions of equal population variables than are some other tests (Sirkin, 1999: 332), it was used to conduct post hoc tests of multiple comparisons for each question where difference reached significance; and

6. Chi-square tests to compare the significance of response differences between respondents in different current post on the questions where variables are categorical, including Q9, Q10, Q13, Q24, and Q27.

The purpose of the study is to understand the views of the most important stakeholders with respect to the construction of a PPM system, anticipating that those who were educational administrators (managers) and principals (employees) were likely to hold rather different opinions as to some issues. Clarifying such variations were regarded as being of paramount importance, though other demographic variables, such as gender, age, academic qualification and length of service were also anticipated to be possible sources of response difference. Given limits of time, space and energy analysis here, therefore, focuses only on differences relating to current post held. Analysis of other variables and their interrelationship will be conducted in the near future and will, hopefully, shed further light on the responses gathered.

6.5 Interviews

6.5.1 Sample selection for interview

Interviewees were drawn from the MOE and three of the nine counties/cities where principal appraisal or school evaluation were taking place (see Chapter Four) and individuals might feasibly have current experience of systems with some PPM-like features. Limitations of time, distance and energy prevented more extensive sampling. Most interviewees had already completed the

questionnaire. My procedure was, therefore, purposive (Fraenkel and Wallen, 2003), in addition to individuals from the MOE, selecting people from three typical local authorities, including a Municipality, a city, and a county. Following Punch (2005:187), Fraenkel and Wallen (2003) and Patton (1990), interviewees were purposively selected from among educational administrators and principals of primary and junior high schools to represent a possible range of professional locations and perspectives. Six representative administrators were interviewed, including a deputy minister at the MOE, a BOE director and deputy director and three section chiefs in charge of principal appraisal/school evaluation in three counties/cities. All held posts important in educational policy making, had high and abundant qualifications in educational administration and considerable, relevant work experience. All were capable of taking a practical perspective on the construction of PPM systems. Each section chief was asked to recommend the three most suitable primary school and junior high school principals serving in their counties/cities as further interviewees (a total of 18), considering their willingness to participate, knowledge of each as having experienced principal appraisal, school evaluation or related evaluation and their location in different schools, by size, gender and seniority (time in post). It was hoped that principals of such varied characteristics and background, as shown in Table 6.4, would provide a variety of perspectives on PPM system formulation. To assure anonymity, the names of interviewees were coded and their current posts and ranks are represented by general titles of educational administrator (EdA), primary school principal (PriSP), and junior high school principal (JHSP).

Table 6.4 Personal background of interviewees (24 cases)

| ID | Post | Sex | Age | Seniority | Appraisal experience | Degree | School size Classes/Pupils |
|-----|-------|-----|-----|-----------|----------------------|----------|-------------------------------|
| A1K | EdA | M | 59 | 29 | 10 years | Doctor | |
| A2K | EdA | M | 42 | 15 | 4 years | PhD St | |
| A3K | EdA | M | 50 | 25 | 5 years | Master | |
| A4C | EdA | F | 48 | 23 | 9 years | Master | |
| A5N | EdA | M | 36 | 15 | 4 years | Bachelor | |
| A6M | EdA | M | 67 | 15 | 12 years | Doctor | |
| P1K | PriSP | M | 44 | 9 | 5 years | PhD St | 17/ 395 |
| P2K | PriSP | F | 50 | 16 | 6 years | Doctor | 56./1686 |
| P3K | PriSP | M | 50 | 11 | 6 years | Master | 31/ 988 |
| P4C | PriSP | M | 50 | 7 | 6 years | Master | 36 / 1202 |
| P5C | PriSP | F | 49 | 10 | 8 years | Master | 28/ 805 |
| P6C | PriSP | M | 59 | 13 | 7 years | Master | 58/ 1961 |
| P7N | PriSP | M | 50 | 6 | 3 years | Master | 6 / 92 |
| P8N | PriSP | M | 40 | 4 | 1 year | Master | 24/ 359 |
| P9N | PriSP | F | 50 | 11 | 10 years | Master | 11/ 198 |
| S1K | JHSP | M | 54 | 4 | 3 years | Master | 23/ 643 |
| S2K | JHSP | F | 52 | 15 | 15 years | PhD St | 65/ 2381 |
| S3K | JHSP | M | 47 | 4 | 2 years | PhD St | 25/ 746 |
| S4C | JHSP | M | 51 | 13 | 8 years | Master | 67/ 2366 |
| S5C | JHSP | F | 57 | 16 | 3 years | PhD St | 55/ 1949 |
| S6C | JHSP | F | 55 | 4 | 2 years | Master | 38/ 1273 |
| S7N | JHSP | F | 50 | 4 | 1 year | Master | 31./ 1062 |
| S8N | JHSP | M | 60 | 18 | 1 year | Master | 19/ 682 |
| S9N | JHSP | M | 63 | 15 | 5 years | Master | 23 /840 |

Note: EdA: Educational administrator; PriSP: Primary school principal; JHSP: Junior high school principal; PhD St: PhD Student. School size is given as the number of classes, followed by total number of pupils.

6.5.2 Question design

Interviews were semi-structured, questions mainly designed to elicit responses that could be compared with and interpreted alongside those arising from the questionnaire and divided into five parts (see Appendix C for the full schedule). The first sought personal background/demographic information from interviewees in preliminary, written form. The second group related to why PPM might be required, including possible professional isolation of principals, their need of continuous professional support and

problems of current principal appraisal. The third group of questions related to the planning and design stage of PPM, including its possible main purposes of, the length of its cycle, recruitment, training, appointment and management of advisers, principal professional standards, key performance areas, appraisal standards, preparation of data collection methods and tools and other ancillary measures prerequisite to PPM implementation. These were followed by questions related to PPM operation, including performance objective setting, agreements, counselling, appraisal, reporting, the conduct of review meetings and confidentiality and due process. Finally, questions were put that were mainly related to the treatment of outcomes, including performance improvement and its resources, professional development, performance rewards and principal selection.

6.5.3 Interview procedures

Semi-structured interviewing was undertaken using an interview guide approach (Fraenkel and Wallen, 2003: 457) Encounters were guided by a list of topics and issues to be explored, while the sequence and wording of questions were decided case by case (Merriam, 1998), maintaining the flexibility to probe areas of particular concern with each interviewee, either by adding questions likely to elicit answers or to eliminating those appearing inappropriate or unproductive.

Having confirmed the willingness of interviewees to cooperate, I first contacted each of them by telephone and emailed information on the background and purpose of the study, along with an interview outline and statement of interview agreement to each. The times and locations of interviews were arranged, all of which I conducted between December 2005

to February 2006 in offices or mini-meeting rooms at respondents' places of work. Mobiles were usually switched off before interviews started and reception personnel informed by interviewees that they should not be interrupted except in emergency. There was rarely interference except when a few interviewees forget to switch off their mobiles and received unexpected calls, though none disrupted the continuity of questioning.

Interviews were audio-recorded, while I manually noted response attitudes and unusual interviewee contributions. Before the beginning each interview, I would briefly allude to my research purposes, how I proposed that the interview be conducted, how data would be analysed and the proposed usage of the study. I then explained my reasons for wanting to audio-record and the ethical considerations governed my activities before asking for consent to proceed. When informed consent was given, as it was in all cases, I presented the written statement of interview agreement to be signed by each interviewee (Appendix D). Then, before interviews proper started, I inquired as to whether individuals understood the questions sent to them in advance and offered any further explanation that seemed necessary. Each interview took about two hours while some, where participants became particularly engaged in their responses to questions, went on for about three. All interviews were accomplished in a relaxed mood and atmosphere.

6.5.4 Validity and reliability

In qualitative research validity and reliability are important though the criteria and terms used may be different from those with which we are familiar in quantitative research (Bryman, 2001: 270). Guba and Lincoln (1994, 2000) suggested four conventional criteria for demonstrating the trustworthiness of

data in qualitative research, credibility, transferability, dependability and confirmability, which are paralleled in quantitative modes by internal validity, external validity, reliability, and objectivity, respectively. Confidence in the ‘truth’ of the findings is internal validity (credibility), while external validity (transferability) is the extent to which the findings may have applicability to other respondents or contexts. Reliability (dependability) is the consistency of findings if research is replicated with similar respondents and contexts. Objectivity (confirmability) is the extent to which findings are based on the characteristics of respondents and the contexts rather than on subjectivity or biases, motivations, and interests of researchers (Lincoln and Guba, 1985: 218). LeCompte and Goetz (1982) proposed that internal reliability, a concern for many in qualitative research, be assured by the recording or translation of data into categories being agreed by more than one observer. They also argued that criteria of external reliability (like those of dependability) and external validity (like transferability) are difficult to meet because it is hard to replicate social circumstances and generalisability across social settings may be limited by single, small samples in qualitative research. On such logic, in this study issues of validity and reliability of interviews mainly focus on their credibility (internal validity), internal reliability, and confirmability (objectivity).

While researcher bias is an issue within all research modalities, the instrumental role that researchers play in qualitative study required special vigilance in this respect, using a number of techniques to check their perspectives against being misinformed (Fraenkel and Wallen, 2003:463). In order to intensify its internal validity (credibility) and internal reliability of the data, I sought to utilise ancillary instruments, repeatedly verifying data by

means of audio-recording, double-checking, and member-checking data with original participants (Lincoln and Guba, 1985: 314). Audio-recordings of the whole interview process were taken and written transcripts made. So as to ensure accuracy and internal reliability of data, transcription was undertaken by a third party, and then I listened to audio-recordings while reading written transcripts and made any corrections that were necessary. During data analysis, coding and categorising was cross-checked by an assistant who had been trained by me to participate in data transcription, in the interests of enhancing credibility (Guba and Lincoln, 2000). While based on 16 years experience of administration management in local government educational departments, my ability to gloss interview content was, thus, checked against and enhanced by ensuring that participants' real meanings were as accurately recorded as possible, with minimum distortion or misunderstanding. Finally, in order to intensify the confirmability (objectivity) of data, not only were such repeated cross-checks adopted, but every effort was made to exercise practical reflexivity in identifying and avoiding possible bias and subjectivity during the process of the study.

6.5.5 Methods of interview data analysis

Unlike analysis of quantitative data, there are less well-established and widely accepted rules for the analysis of qualitative data, 'grounded theory' having become by far the most popular, and in many ways misunderstood and 'overclaimed', framework for analysing qualitative data (Bryman, 2001: 390). In quantitative data analysis, variables are predetermined, while they are emergent features of qualitative analysis, formed only after some information has already been collected and techniques used to analyse and

clarify its meaning in relation to study questions. The core analysis techniques of grounded theory include coding, constant comparison and theoretical saturation. Coding is a key process whereby data can be broken down into component parts, which are given names. Constant comparison is a process of maintaining a close connection between data and concepts and categories with their indicators. Theoretical saturation is a process in which a point is reached where there appears to be no further point in reviewing data collected to see how well it fits the concepts or categories developed (Bryman, 2001: 391). Such a process of data analysis can be divided into seven steps:

Step 1. Transcribing the audio-record into written form: in this enquiry every digital audio-record was transferred into MP3 digital file and one by one transcribed in written form, noting meaningful special intonations and situations in brackets

Step 2. Category of question: transcript contents were coded and categorised into different files according to interview questions, each having its separate code for each of the research question. Interviewees' responses with respect of specific questions were put together, simplifying subsequent coding. An example of this form of categorising is the following:

| Interview Question (Q1) | | | | |
|-------------------------|---------------------|-----------------------------|--------|------------------|
| Participants | Transcripts (texts) | Contrast with questionnaire | Coding | Concept/Category |
| A1K | | | | |
| A2K | | | | |
| P3K | | | | |

Step 3. Contrast with questionnaire: the data analysis method used in this study was based on a dominant–less dominant design, sequential explanatory strategy (see Section 6.3.1), where analysis of qualitative data aimed to cross-validate, complement, and interpret quantitative data. Thus the major coding categories within each interview question were juxtaposed with their corresponding questionnaire item to highlight contrasts and similarities.

Step 4. Coding and noting: when reading through transcripts, open coding was carried out, each coding given an initial name as an analysis unit. Key words in texts were marked with bright colours.

Step 5. Constant comparison: each new interview coding unit and its corresponding questionnaire element was compared to determine similarity/difference.

Step 6. Abstracting concepts and categories: after finishing coding and comparison abstraction of core concepts or subcategories began from accumulated coding units by way of the process of constant comparison and redefining each concept more clearly and meaningfully. In Glaser and Strauss's (1967) original terms, higher level categories may also be elaborated from accumulated concepts or subcategories until they reach a point of saturation and texts add no new information. This is an extremely demanding and time consuming process, virtually a counsel of perfection, in which I can only marginally claim to have indulged. In this case I would claim only to have worked my qualitative data in a *spirit* of grounded theorising, not in terms of its full demands and rigour.

Step 7. Whole review: in order to ensure all transcripts, codes, concepts, and categories were analysed as thoroughly as was possible, all data analysis, was cross-checked, both by myself and my assistant and necessary adjustments made.

Step 8. Comparison and interpretation with quantitative data: when interview data analysis was complete I could begin integrating its findings with quantitative outcomes, so as to cross-validate, complement, and interpret my study questions, choosing appropriate quotations in illustration of interview evidence in respect of each theme.

6.6 Ethical Considerations

All social science research, especially qualitative study, inevitably involves ethical issues, involving data collection from people and about people (Punch, 2005). Fraenkel and Wallen (2003:442) emphasised three ethical principles in conducting a study, including confidentiality, informed consent, and no harm to participants. Kvale (1996:110) indicated that ethical issues should be considered through the entire research process, including an orientation to improvement, informed consent, securing confidentiality, protection from harm, ensuring fidelity in transcription and interpretation and recognition of professional scientific responsibility. Miles and Huberman (1994) also listed eleven broader ethical issues to serve as guidelines through a complete qualitative research process, including the worthiness of the project, competence boundaries, informed consent, benefit, cost and reciprocity, harm and risk, honesty and trust, privacy, confidentiality and anonymity, intervention and advocacy, research integrity and quality, ownership of data and conclusion and use and misuse of results. As a social science researcher, I attempted to ensure that appropriate ethical standards were maintained as conscientiously as possible in this study throughout its design, data collection, data analysis stage, and report stages.

In the design stage, the worthiness of the study and my scientific competence and responsibility were issues (Kvale, 1996). At the data collection stage respect for participants, informed consent, anonymity and confidentiality were considerations. At the data analysis stage, scientific responsibility, confidentiality and accurate written transcription, data analysis and interpretation were priorities. Babbie (1998) indicated that social researchers have not only many ethical obligation to participants but to the scientific community, including scientific responsibility for analysing quantitative and qualitative data and faithfully presenting results. Considering a balance of responsibilities, when a sensitive response was mentioned by interviewees that I thought should not be recorded publicly, appearing to have the potential to harm the person making it or those to whom it referred, I undertook to delete it from transcript. The report stage required me, following Babbie (1998), to indicate that, while I should be more familiar than anyone else with the technical shortcomings and failures of the study, they should also be admitted to others, just as routinely as unexpectedly negative findings should be reported. I would submit that the procedures which I have detailed above have striven to meet these demanding criteria.

6.7 Summary

In order to examine the perspective of stakeholders with respect to the construction of a PPM system, a mixed method of sequential explanatory strategy in a dominant–less dominant design was used to conduct empirical research. A questionnaire survey sampled educational administrators and principals from twenty three counties/cities and the MOE in Taiwan, while twenty four educational administrators and principals are selected from MOE and three typical counties/cities for interview. Both quantitative and qualitative

methods and data collection processes were deliberately designed so as to assure ethical procedures and the validity and reliability of data. The results of data analysis are described in Chapter Seven while the conclusions and recommendations of the study will be reported in Chapter Eight.

Chapter Seven

Results of Data Analysis

The purpose of this chapter is to present the results of data analysis from both questionnaire survey and interview. It is divided into three sections which relate to: why we need, how we plan; how we implement; and how we treat outcomes of PPM systems.

7.1 Why We Need a PPM System and How Should We Plan It

In this section we consider first what questionnaire respondents said about why the Taiwanese system might need and how to plan a PPM system, noting differences in the perspectives of those in different posts over 16 questions (Q1-Q16) on eight issues, as described in Section 6.4.2 and given in full in Appendix A, along with the corresponding interview questions (Q1-Q5.8) alluded to in Section 6.5.2, given in full in Appendix C . While a Likert-style, four point scale is adopted to score responses to these items (and to most others in the schedule) the actual responses of all respondents to each are displayed as means, where the higher the score, the greater the average degree of agreement, 3 points standing for agree and 2 points for disagree, with a mean scale of 2.5 points. Thus, if the overall mean for a question is significantly higher than 2.5 points, it can be taken that, overall, respondents slightly tend to agree but not generally agree with a question, if over 3 points, they generally do so. By the same token, a mean lower than 2.5 points signifies overall that respondents are slightly inclined to disagree while, below 2 points, that they commonly hold negative views about the question. Comparison of responses of those in different current posts (education administrators (EdA), junior high school principals (JHSP) and primary school

principals (PriSP) relied on One-way analysis of variance (One-way ANOVA) and the Scheffé test method as post hoc tests of multiple comparison, while Chi-square was used to analyse nominal variables (see Section 6.4.4). The results are given in Appendices E and F. Interview findings were then used to illustrate these quantitative analyses. These are presented in thematic groups, are laid out, as far as possible, in connected, narrative form and offered with minimum punctuation. The transcription conventions of the apostrophe ... was used to indicate hesitation and [...] to mark abridgement. The difficulty of achieving sympathetic translation from Mandarin to English, particularly with regard to colloquialism, is freely acknowledged. Moreover, there are some terms which are part of the everyday vocabulary of respondents which have no precise English equivalents. Attention will be drawn to these in appropriate contexts.

7.1.1 Why we need them

While professional isolation of principals (Q1) scored only 2.35, principals' need of continuous help and support (Q2) and PPM in establishing school effectiveness (Q3) showed means of over well over 3 (detailed in Appendix E). There were no significant statistical differences in the responses of those in different posts to these three questions.

7.1.1.1 Role isolation of principals

By and large, respondents tended to slightly disagree with the view that school principals suffered from role isolation (Q1, $m=2.35$), contrary to the views of Hewton and West (1992) and Mercer (1996). However, some interviewees indicated that as school principals worked at the top of the school hierarchy they often seemed to be highly superior to other school staff,

such that faculty members were very reluctant to approach them openly, some actively avoiding access. Given this high power distance culture (Dimmock, 2000) in schools, while we might expect that principals might experience isolation, their sense of it was not readily apparent and varied between individuals, more likely acknowledged by novices than veterans:

The principal is a leader in a school just like the top of a triangle. So he or she may feel lonely in some way. (A4C.Q1)

However, even though we get well along with our teachers, we still feel that we may play isolated roles sometimes. It is as if an intangible gap has been created due to our and their positions [...]. They respect our positions as school principals. (P8N.Q1)

Especially when I was just designated as principal [...] I didn't quite understand from where to obtain resources. So I was quite lonely but later as time went by I just came to know about some supporting systems. But generally speaking, school principals may feel lonely in playing their roles. (S4C.Q1)

The sense of isolation in playing the role of school principal is after all correlated with what school principals would wish themselves to become. (P2K.Q1)

I would be quite unlikely to have such a kind of feeling myself, because I would always take active and positive actions to make friends with all others [...] so I would not have the feeling of isolation (P5C.Q1)

If you isolate yourself [...] the social resources acquired are relatively diminished and this would be not helpful to the operation of school either (P6C.Q1).

As for good mentors and helpful friends, interviewees tended to believe that there was little issue as long as principals openly sought advice from others and achieved professional growth by way of continuously attending to advanced study. Problems might be more apparent in remote areas or those

lacking in resources than in urban areas. Selecting appropriate advisers for newly appointed principals and designing various activities for their professional growth was important:

According to my observations [...] both deans and teacher groups are highly active in sharing their experiences, but principals seem too failed in this aspect. (A2K.Q1)

Such a feeling of lacking advisors and helpful friends would be rare in urban areas where resources are substantial, but I believe that it can be very serious in those rural, remote or off-shore island areas. Given that a principal works alone in a remote area, there would be no career growth at all. (A6M.Q1)

When observing my colleague group I found that this is just [...] a feeling that there is a lack of consultancy and professional growth an encounter of frustration and various crises [...] a feeling that there is no idea of how to do and whom to ask. (P1K.Q1)

Actually, not everyone would necessarily encounter a lack of good advisors and helpful friends and this problem depends on different individuals just as Confucius once said: 'Whenever I stay with any other two persons, I can surely learn something from either of them' [...] If the principal is a person who tends to learn in any case then he/she will never feel that he/she is in lack of good advisors or helpful friends [...] But somebody may be quite passive and so, he/she will lack good advisors and helpful friends. (A4C.Q1)

Relatively I have a better case myself and I don't feel that I am devoid of good advisors or excellent friends or playing a lonely role mainly because I can keep in pursuit of advanced studies (P1K.Q1)

7.1.1.2 Need for professional support

Respondents generally strongly agreed on the need for professional support and aid from others throughout their professional careers (Q2, $m=3.52$). Again, responses of different respondent groups were not significant. Interviewees

indicated that, while they had already acquired experiences working as teachers and deans of department, principals' roles were different and changed over time, as did policies; they had need of assimilating new knowledge and learning about policy directions. However, the professional growth activities made available to school principals in Taiwan were very fragmentary and very much tied to policy requirements, falling short of the needs of continuous professional development planning and support systems.

School Principals' Association workshops, currently available in some areas, offered them opportunities to share experiences and provided for professional growth, though such spontaneous growth inclined towards mere fellowship if it lasted too long. Those principals showing little initiative in taking part in advanced studies should be impelled to do so through specific mechanisms offering individual professional support of continuance:

Continuous professional support is requisite for any position and therefore, a principal should demand it. Particularly in Taiwan, education circumstances have been changing tremendous; simply using previous knowledge to solve issues in the future can be difficult. Therefore, it would be most ideal for him if professional support were to be offered continuously [...] In view of currently available systems in Taiwan, there is indeed a lack...of any formal system that provides school principals with continuous, professional support. (A4CQ2)

Our own city has established a school principal association as well and it can actively aid in the growth of principals. For instance newly appointed principals [...] would look for help to experienced principals [...] or ex-principals to provide guidance [...] When there is continuous support from an external adviser to a principal in the operation of a school [...] the period of his/her induction will be shortened. (S1KQ2)

The principal workshop can serve as a platform on which school principals can gain continuous growth in their knowledge and competencies of the operation of school affairs [...] where principals actively [...] put forward their

requirements [...] fulfilling relevant studies, mutual sharing and common growth [...] I personally regard the results as quite good. (P4CQ2)

However, as spontaneous professional growth between school principals goes on, it will become an activity of interpersonal relationship [...] which is actually something like fellowship activities? [...] So if there are formal systems allowing professional support and growth I think that principals can learn faster about how to operate their schools. (S2KQ2)

7.1.1.3 PPM systems and school effectiveness

Respondents tended to strongly agree, again relatively uniformly across categories, that a PPM system would help them promote school effectiveness (Q3, $m=3.46$). Interviewees pointed out that there was presently a lack of human resource development policies in Taiwan, principal appraisal rarely entailing professional support. It was necessary to build up management systems which incorporated a counselling function that could both provide professional support and enhance school performance without reference to the appointment or dismissal of principals. Several principals expressed their hopes that such a set of plans could be put into effect as soon as possible, reflecting their disillusion with accountability-oriented performance appraisal:

The present school principal appraisal system [...] can offer insignificant professional support while the purpose of appraisal has always been the assessment of how a principal has performed so far [...]. It can rarely provide the positive support to his career [...] but, rather, submits appraisal results as references to members of Principal Selection Committees. So principals seek to demonstrate their superiorities and conceal their inferiorities [...]. Consequently a part of appraisal results [...] can be questioned sometimes. (A4C.Q3)

If with (PPM) [...] several objectives can be focused upon at the beginning of each year [...] as key goals and then resources sought [...] then you operate in accordance with the plan and by the end of the year check whether you have

completed these objectives and further review and make improvements, this is a practicable way. [...] It is certainly assured if such a system is established [...] and it will not generate too much pressure on the principal [...] as he/she can keep making improvements. (S1KQ3)

At this stage [...] we can hardly see a really professional and systematic arrangement for principals, thus there should be such a supporting system in Taiwan indeed. (S3KQ3)

And my last recommendation is to accomplish the system of principal performance management as fast as we can! [...] In the absence of such a system the operations of school principals may become all the more problematic [...] while their qualifications become poorer and poorer. (S4CQ7)

7.1.2 The purposes of PPM systems

Responses to Question 4 as to what purposes should be emphasised in PPM systems produced responses on five out of six sub items with means of over 3 points. The exception was 'Decide principals' salary levels' (Q4.6) which scored only 2.64 (Appendix E). The first three items, which are development-orientated, 'Help with professional development' (Q4.3, mean=3.59), 'Help to improve shortcomings' (Q4.2, mean=3.53) and 'Offer instant feedback' (Q4.1, mean=3.42), are significantly higher than the three accountability-orientated items 'Decide principal annual performance' (Q4.4, mean=3.20), 'Provide references for principal selection' (Q4.5, mean=3.04) and 'Decide principals' salary levels' (Q4.6, mean=2.64). Moreover, response discrepancies between those in different posts (Appendix F) showed no overall statistical difference for all options, though those of EdAs were significantly higher than PriSPs on 'Decide principal annual performance', as were those of JHSPs on 'Provide references for principal selection', indicating that respondents generally agreed that planning PPM systems should be primarily orientated to development rather than

accountability. EdA's legal responsibilities for principal selection and annual principal performance rating can be taken to account in understanding the greater strength of their emphasis on performance and selection as purposes.

Interviewees tended to underline that present principal appraisal or school evaluation in Taiwan was conducted solely for purposes of principal selection, providing neither active guidance nor for performance improvement, engendering teacher repulsion or resistance to appraisal:

As currently school evaluation is conducted just for the purpose of principal selection, it can easily cause the entire school faculty [...] to believe that evaluation is provided to create records of performance for principals rather than stimulate the development of schools. So some of them may be willing to accept the evaluation but some others may resist or repulse the evaluation or not cooperate [...] Also in view of school development [...] an evaluation would require the school to input human resources, time and energy that are very substantial. It's really a pity if the evaluation is carried out simply for principal selection. (P4C.Q3)

Basically, either school evaluation or principal appraisal should stick to the principle of helping principals to find out about problems facing schools and assisting them to solve these problems. But this is not the case with current principal appraisal. Appraisal results just serve as reference for selection after a principal finishes his/her four-year term. [...] Yet it won't help you to sort out problems so [...] (the appraisal) needs to be carried out during the four-year term of school principals not in the last year of their terms [...] This process could help you [...] to run the school much better (P9NQ3)

Such views strongly suggest that school principal performance management should take as its priorities facilitating growth, problem definition and improvement, stimulating principal self-management and growth:

I expect that this management system will signify not only the management of administrative agents over school principals but also self-management...and self-growth of these principals. (A4C.Q5.1)

This system can allow the self inspection of principals [...] and can assist them to find out problems...It is something like the concept of a learning diagnosis [...] I would here stress formative purposes [...] I feel that process can prevail over outcomes. Through the process [...] the system can help understanding [...] of specific problems while giving instruction or making improvements. Once this part is solved the rest will surely follow smoothly (P8N.Q5.1)

This system can be applied to enhance the competencies of principals [...]. And if the competencies of principals are enhanced good performances result. (A5N.Q5.1)

Principal performances [...] the good parts will be incorporated into the talent database of the overall educational system. [...] to be shared as resources between various schools [...]. We can also position it as the mechanism by which to accomplish sustainable performance growth of schools and as the starting point for the next appraisal (P2K.Q5.1)

There was strong support for the establishment of 'three in one' or 'four in one' systems that not only enhanced professional capabilities and facilitated or improved school performance but also provided references for current, annual performance rating and principal selection:

I think there should be several main functions. The primary key function should be to help a principal to enhance his accomplishment, knowledge and competency continuously on the job market; the second function is to help principals to overcome management problems, the third function is to carry out annual assessment of principals which can be certainly taken as standard performance rating, the fourth function is to provide the basis for the selection of principals after their term of four years. (P1K.Q5.1)

If it is a PPM system, I think that it should be multi-functional system that can replace the one currently available in schools [...] covering the professional growth of principals and improvement of school performances or even [...] serving as reference for principal selection. If such functions can be integrated, just like Three In One or Four In One we often talk about, the interference that the system creates for school administration can be minimised, while it can be most beneficial to the schools. (P4C.Q5.1)

7.1.3 Length of cycles

As for the time planning of performance management cycles, some interviewees believed that it should be one year, others two or even four or else dependent on the term and performance of principals. These views tended to match those on purposes, those privileging personal development and improvement and key annual objectives tending to favour one-year cycles, those oriented to accountability four years:

If we look at this issue from the perspective of assisting principals to achieve continuous professional growth or development [...] I would say one year. (P1K.Q5.2)

If you want to review objectives every four years [...] then it will be too long. Actually, the review should be done each year! (P7N.Q5.2)

Because if it is too long then timely feedback will be insufficient. (S1K.Q5.2)

If one year [...] then we can appropriately find some issues or make remedies or improvement or give some advice and counsel. (S4C.Q5.2)

If in two years, three years or four years, then it will be too slow! (P6C.Q5.2)

As...there will be a key point of promotion for each year [...] the cycle should be one year. If it is aiming to review the overall performance of the principal, it should be four years (P9N.Q5.2)

If it is to assist principal selection, then it could be appropriate to have a cycle of four years. Again, the cycle could be one year if it is set for the annual appraisal of principal performance (P1K.Q5.2)

As newly appointed principals were required to reach an understanding of and establish school development plans in the first year of office, it might be appropriate for the first cycle to be two years and subsequent cycles one year:

When newly appointed principals enter into a new environment (school), they may need some time to learn about their environment and set up school operational objectives; so that their performance management should begin from next academic year. This means that the first appraisal cycle should be two years and subsequent cycles one year [...]. A one-year cycle could be OK for those principals reappointed in the same schools. (P4C.Q5.2)

7.1.4 Planning advisory functions

The literature suggests that the character, background and duties of advisers are critical elements in whether performance management can effectively accomplish the purposes expected of it (see Section 5.3). Accordingly, Questions 5-10 asked about their qualifications, abilities and competencies, sources of recruitment, professional training and certification, management, employment, selection and appointment.

7.1.4.1 Can inspectors be advisers?

In Taiwanese schools principal performance is managed through Education Bureau inspection systems. Inspectors' qualifications are determined by a wider public administration system so that those in Bureaus of Education in various counties/cities may not all have educational backgrounds. They may well be qualified for conducting administrative inspections but may not be competent as educational professional inspectors:

If it is set up to really fulfil the purpose of development for principals, I feel that there will be demands for external advisers. (A6M.Q5.3A)

Considering the present inspection system, it is actually difficult for inspectors to offer advice to principals. Hence, it is necessary to provide additional personnel to give professional support for principals. In other words, it is necessary to have external advisers. (A5N.Q5.3A)

Who can be supporters, counsellor or supervisor [...] or can act as the mentors.
(A1K.Q5.3A)

7.1.4.2 Qualifications required of advisers

As to the qualifications and competencies required of advisers, the mean scores of all respondents to each the eleven substantive items of Question 5 was never less than 3.43, 'Good personality characteristics' (Q5.11, $m=3.69$) ranked highest, with 'Communication and interpersonal skills' (Q5.7) at 3.66, 'Problem diagnosis ability' (Q5.5) 3.65, 'Administrative management ability' (Q5.4) 3.64, 'Professional knowledge about education' (Q5.2) 3.62, 'Strategy planning ability' (Q5.3) 3.60, 'Counselling abilities and skills' (Q5.9) 3.51, 'Human resource management skills' (Q5.8) 3.48, 'Data collecting and analysis ability' (Q5.6) 3.4, 'Ability in developing action plans' (Q5.10) 3.47 and 'Experience of running schools' (Q5.1) 3.43. As to this last item, the reaction of PriSPs was significantly stonger than that of EdAs (see Appendix E), as it was for 'Experience of running schools', 'Professional knowledge about education', and 'Data collecting and analysis'. These responses, while stressing personality traits and communication skills also ask for problem diagnosis and relevant counselling capabilities and skills. Experience would suggest that these commonly go hand in hand.

Interviewees also believed that as advisers would provide counsel to principals they ought to exceed them in competency, experience and academic knowledge so as to ensure acceptance, paticularly in regard to communication skills, leadership, educational expertise, interpersonal relationships, familiarity with the job, a masters' degree or above and excellent performance in running a school or rich experience in educational administration, as well as the exalted character, justice and integrity:

The adviser should be better as a person receiving the approval of principals due to his competencies including domain-specific knowledge and capabilities [...] in such areas as...management, leadership, administration and communication, as well as his reputation, etc. (A2K.Q5.3B)

Advisers should certainly have communication capabilities as they would have to teach others...they should also present leadership [...] demonstrate their educational expertise [...] understand how to assist principals in running schools [...] and know about how to deal with interpersonal relationships. [...] To guide a principal you will have to be more proficient than he/she is. Whatever capability a principal needs, advisers must have such a capability or even be more capable than principals. Without these, how can you guide the principal? [...] Besides, there are some necessary conditions regarding academic degrees, where a Masters' degree in the relevant areas such as educational administration is a must. Nowadays, the great majority of principals hold masters' or doctoral degrees and advisers should have better qualifications in every regard. (A4C.Q5.3B) [...]

Also, they need to have a very lofty personality...that is, they must have excellent deportment, justice and integrity. (S8N.Q5.3.2)

7.1.4.3 Where should advisers come from?

As to the most suitable candidates for advisers (Q6), the mean scores given by respondents to its five items ranged from 2.99 to 3.27 points, signifying agreement, if rather more weakly than to those of Question 5. In order of descending approbation, item scores were: 'Other excellent principals' (Q6.4, $m=3.27$), 'Qualified advisers trained' (Q6.3, $m=3.13$), 'Inspectors of the Bureau of Education' (Q6.1, $m=3.09$) and 'Scholars and experts from higher education institutions' (Q6.5, $m=2.98$). EdAs approved significantly more strongly than PriSPs and JHSPs of advisers being selected from among inspectors, while PriSPs favoured significantly more highly 'Other excellent principals' and those qualified and trained by the government than did EdAs. We might say that, on balance, respondents believed that ideally candidates

should be excellent principals or those trained as advisers rather than inspectors or scholars.

Interviewees also held the view that some excellent incumbent or retired principals would tend to have better knowledge of schools through successful experience of practice, though they were concerned about the limited availability of time among busy, incumbent principals. Some regarded inspectors as unsuitable, their qualification for appointment resting on public administration expertise not experience of teaching or school leadership, though some might be appropriately trained. Such lack of professional teaching expertise was likely to be mistrusted by principals. Scholars as advisers should also have experience in either administrative management or practical school affairs:

The source of part-time advisers [...] would probably be excellent incumbent principals, retired principals or those with practical experiences in universities [...] while I feel that either those people who have once been principals or those with practical experiences in educational administration would more likely be adaptable as advisers because they have undergone practical work on site and can be very experienced in the overall development of schools. But they still need [...] training and intensification of their abilities in performance management (S4C.Q5.3C)

Excellent incumbent principals should be OK but I am afraid that they might be too busy because they have their own schools to manage. So the problem is the time they have! (P9N.Q5.3C)

Some inspectors are not from educational administration systems and they have never served in schools before...how can they undertake the inspection of school principals? (P7N.Q3)

If candidates are inspectors or section chiefs of Bureau of Education they could be OK because they have long served in education administrative units and also have accessed everyday school administrative affairs except that they lack

some know-how on the internal administration of schools [...]. But such knowledge can be well intensified through study and training. (P4C.Q5.3C)

Of course, scholars and experts would be another option. However I sometimes feel that if so-called scholars and experts have no experience in either educational administration or schools or are actually inexperienced their ideas or views could be a bit too idealistic [...]. So it is quite critical for candidates to have previous experience of service in schools. (A4C.Q5.3C)

7.1.4.4 Who was suitable?

Respondents generally agreed that advisers should accept professional training to obtain certification (Q7, $m=3.49$), PriSPs and JHSPs doing so significantly more strongly than EdAs. But the paradox remained that those deemed most acceptable, particularly to principals, were anticipated to be the busiest, precluding their extensive training:

Professionals should have a certain recognition of school operations, ideally they have been school principals, then recruited by educational authorities and able to undergo the training process [...] so that they will have acquired a deep insight into the current operation of schools, prevailing education policies and the future of education. In this way they can be more qualified for advisory work. (P4C)

I think it's very hard to organise on-job training. Because if recognised candidates are widely praised principals or scholars and have high academic or administrative status it is quite difficult to ask them to be trained [...] So unless training programmes last only two or three days, it might not be quite acceptable to them. (A1K.Q5.3D)

7.1.4.5 Training modalities

Respondents on balance believed that central government should establish a PPM adviser selection pool that could be used by local governments or schools (Q8, $m=3.32$), again PriSPs doing so significantly more than EdAs.

Interviewees also saw that local education authorities, having consulted their actual recruitment requirements and human resources, might recommend suitable candidates as advisers to be provided by central government with a single form of training, establishing a nationwide pool of advisers from which they might subsequently be selected in accordance with actual demand. Such a practice would not only create substantial economic benefits but also ensure that advisers received comprehensive training:

I feel that the training program should be conducted by central government, but candidates recruited or recommended by local authorities. It is because each place has its own distinctive specialty or features and the local education authority will base recommendation of candidates on its own demands [...] It would be ideal if central government undertook training provision and candidates selected were of high quality [...] When they are well-trained and the manpower established in terms of different regions, then local education authorities can with benefit select advisers for their principals through this talent pool (P4C.Q5.3D)

7.1.4.6 Employment modalities

52.7% of respondents to Question 9 believed that advisers should be the full-time, 42.6% part-time, with no statistical significance between employment categories (Appendix E). At interview some proposed that either excellent, incumbent or retired principals could be temporarily seconded to act as full-time advisers:

It would be optimal if they worked as full-timers since full-timers will differ from part-timers in both their assumption of job duties and attitudes towards work. If they work as full-timers [...] they could be much more dedicated [...]. If they work as part-timers they would have to deal with their own work. If their own work is too busy, they would have to reduce time for counselling correspondingly. (P6C.Q5.3.5)

Full-timers should be better. For part-timers, the workloads would be too heavy...their counselling for principals would become superficial or formulaic (P8N.Q5.3E)

On the other side, it is possible to temporarily transfer excellent incumbent principals and ask them to specialise in counselling work. In this way, it would be easier for advisers to work well, without controversy (P4C.Q5.3E)

Two years or three years later [...] after counselling work is done they can well return to schools to work as principals. So I believe that full-timers could be better. (S3K.Q5.3E)

However, interviewees knew it would be difficult to employ full-time advisers in the absence of laws or regulations for their employment, difficult local government financial conditions and current policies of curtailing public employment. Using part-timers was much more feasible and its benefits manifest if they were incumbent principals extending their experience of running schools, in plentiful supply, at relatively low expense, even though in danger of distraction from counselling work by their main employment. Each local authority might be allowed to work out its own mix:

I quite agree that advisers should be full-timers and it would be best practice. But it can be hardly realised as there is currently no legal decree as the foundation (A3K.Q5.3E)

In the absence of resources, we can just provide part-time incumbent or retired principals with a small allowance entailing a small financial burden. When the resources are available, we may then proceed to employ full-timers. (A6M.Q5.3E)

In my view it would be better to have simultaneous existence of both full-timers and part-timers in consideration of their career growth. The reason is that when the part-timer is a principal with excellent performance and practical experiences, he/she would be capable of working very seriously at counselling [...] but if there were some places where somebody was willing to be involved in

full-time counselling work, I think it would also be quite good. (P1K.Q5.3E)

7.1.4.7 Adviser selection and appointment

In answering who should be responsible for selecting principals' advisers (Q10), nearly two thirds of respondents said that it should be Education administrative authorities for schools (62.3%), followed by Local Education Committees (20.6%) and Local Government Principal Selection Committees (12.5%). There were only a very small number of respondents who believed that Parents' Committees for Schools should be responsible for such employment (0.9%). Again, there was no statistical significance in differences between employment types. Such responses suggest wide acceptance of the views that 'power should correspond to duty' and of 'whoever is boss of a school should have the right to undertake supervision'

As to ways of selecting advisers, some interviewees indicated that they should be decided by the main purpose of a PPM system; if development was to be emphasised, principals should be allowed to select suitable advisers for themselves according to their specific needs, if principal selection or other summative purpose was uppermost, local education authorities should be in charge of assignment of advisers for each principal:

It all depends on the question 'why use this sort of management system?' If it is only for the purpose of helping principals to acquire professional growth or assisting them to make improvements, it would be ideal if they could select their own principals first and then recommend their choice to Bureaus of Education for final appointment [...] If it is for principal selection then it is necessary for Bureaus of Education to assign these advisers. (A1K.Q5.3F)

In the interests of intensifying mutual trust, as well as of assisting principals to make improvement, while ensure their accountability, some interviewees

indicated that it might be appropriate to allow principals to select two or three possible advisers, one of whom would be selected by the educational authority:

It would possibly need to take account of both sides. I think it could be better for example to let the principal recommend two or three candidates first and then to request the educational bureau to make the decision about appointment. Because when assignment of advisers is top down it may not necessarily meet principals' requirements. In contrast, if principals are allowed to select advisers fully by themselves, they may choose the most familiar person offering little pressure, instead of considering their professionalism [...] So if principals can take initiatives to recommend their own advisers and then Educational Bureaus can make final decisions about appointments [...] it would be possible to take account of the needs on both sides. (P1K.Q5.3F)

Other interviewees believed that it should be stipulated that an adviser should work with the same principals for up to three consecutive years, thus avoiding over-familiarity, collusion or avoidance of difficulties, lowering objectivity and effectiveness between principals and their advisers:

I think it is still necessary to regulate the length of time that advisers work in the same school, because Chinese highly friendship value, especially after knowing each other for a long time period. Having become too familiar with each other, it could make fairly difficult to say something serious. Besides [...] advisers cannot work too long since they may develop preconceptions about schools [...]. So it could be more helpful to schools to replace them with others who offer advice (P5C.Q5.3F)

Whenever you focus on advice only from a certain person there will be the likely presence of blind spots. (P1K.Q5.3F)

7.1.4.8 Payment of Advisers

Respondents only very slightly agreed that if advisers were full-timers their

pay should higher than those of principals with whom they worked (Q11, $m=2.73$) but were rather more positive about their payment being linked to how many cases they dealt with, if they were part-timers (Q12, $m=3.06$). This could be taken either to reflect a belief that that the performance of advisory functions was less important than the qualities of those who performed them or signify a deeply engrained link between remuneration and authority in the system. They were equally divided about whether payments to them (Q13) should be the responsibility of the MOE (50.1%) or local governments (50.1%), with no significant statistical significance between responses of those in different posts (Appendix E). Interviewees saw salary levels as representative of job stratification:

If we employ advisers as full-timers their workload would be seen to be higher than that of principals. Thus it would be reasonable that their payment should also be higher (A5N.5.3G)

If principals are temporarily transferred from schools as full-time advisers their salary should be the same as principals and they should be given affirmation through certification of the work experience (S3K.5.3G)

If expenditure is too high it may be difficult for local governments to afford it. Therefore, it would be reasonable for part-time advisers to be given transportation allowance which would be acceptable to local government...If they are incumbent principals costs can even be lower (A1K.5.3)

If they are part-time it would be reasonable that payment was related to numbers of cases they serviced (A2K.5.3G)

If they are part-time payment or such symbolic rewards as certification of having counselled so many principals should be given. Salary would not be so importance for principals (S3K.5.3G)

If they are part-time advisers transportation allowance should be enough because to be advisers is an affirmation which is of even more value than an allowance (P2K.5.3G)

If principals retired [...] at fifty years [...] they would be willing to offer a tribute [...] transportation allowance should be enough [...] because it is an honour! (P7N.5.3G)

Some principals thought that if a level of advisory principals given responsibility for PPM advisory work could be set up in the classification of principals, problems of full- or part-timeness could be solved:

If advisers were to be paid as the level of principal it would be possible to design an advisory principal level in the principal classification and endow it with the duty of accounting for performance counselling. Advisory principals or expert principals could be full-time or part-time advisers and that would be great I think. (S3K.5.3G)

7.1.5 Professional standards for principals

Respondents tended to agree that government should set up national principal professional standards for appraising their professional development and performance in a PPM system (Q14, $m=3.50$), again with no significant difference between categories. It was possible to set up basic thresholds of professional standards, which needed to be enforceable, or else be established in vain:

I feel that basic principal profession standards should be necessary [...] but adaptation to local conditions should be also considered. (A6M.Q5.4)

If we carried out objective and quantitative comparisons of performance appraisal, or even used such data as reference in the training of school principals, then I feel that it is necessary to set up such nationwide professional standards for principals. (A5NQ5.4)

But, objections to the formulation of such standards were also made by some interviewees who believed that leadership was a kind of art and school

management quite different to operating a factory. Schools generated different typical features as a result of distinct principal leadership styles, such that it might be overly rigid to work out standards that were anything more than ideals *qua* professional beliefs or principles:

Can we stop talking about standards, as standards need to be consistent? However, professional standards for principals are not standards in my eyes. If they are escalated to an upper level, they should be called beliefs [...] we should turn to talk about levels of ideas and principles. Such standards may sometimes involve operating concepts [...] In fact, the leadership of principals is a kind of art, and where you can not tell what kind of leadership is the best since it accords with a certain standard! (A2K.Q5.4)

The educational field is not complete reification. If standards had been specified, do you think they would become reified? Reviewing a school is absolutely different from a factory [...] school management [...] principal professional capabilities can be distinctive. Just because of the distinctiveness, the school can create its own features. If identical standards were set they would become too rigid! (S1K.Q5.4)

7.1.6 The key performance areas of principals

Respondents' reactions toward the twelve key performance areas (KPA) of principals, each constituting a sub-item of Question 15, showed mean scores of at least 3.18 points, ranging from administrative management (Q15.2, $m=3.50$), principal profession development (Q15.6, $m=3.47$), strategic planning (Q15.1, $m=3.47$), curriculum and instructional leadership (Q15.3, $m=3.46$), staff management (Q15.9, $m=3.43$), professional disposition (Q15.5, $m=3.40$), moral leadership (Q15.4, $m=3.39$), achievement of principals' annual performance objectives (Q15.10, $m=3.36$), pupil attainment (Q15.11, $m=3.31$), parental satisfaction (Q15.12, $m=3.25$), public relationships (Q15.7, $m=3.23$), and financial management (Q15.8, $m=3.18$), yet again with no

significant differences between employment categories. They reflect distinctive requirements of principal performance in Taiwan which are different from those of Britain or New Zealand. In the latter community-controlled, school-based management is widely adopted, responsibility for which principals pay a great deal of attention, along with pupil attainment, parental satisfaction, public relationships and financial management. These items come relatively lower in the hierarchy of key performance areas recognised here. This is possible because duties of administrative management have been traditionally thought of as central to our bureaucratic system, while objective standards for pupil attainment have not been established and parents are not seen as legal employers or managers of our schools. Moreover, though public relations are important, they serve only as means rather than ends, while school financial management is clearly regulated by wider financial management systems undertaken by full-time accountants in schools and is less in the control of and less important to our principals.

Interview evidence concurred, with special emphasis is on personality traits and interpersonal relationship skills of principals, the former referred to in terms of the professional disposition of principals, such as love, empathy, education values and morals, the latter involving both internal and external relationships. The belief was that if principals were skilled in dealing with interpersonal relationships, school management would run very smoothly:

Whether a school is good or bad can be probably manifested at two levels: the first level is interpersonal relationships and the second capabilities for leadership. There would be possibly no problems if things on both levels are well undertaken. Interpersonal relationship involves both internal and external relationships. The capabilities of leadership would be demonstrated in administration and teaching. When issues in both areas are sorted out I guess there will no big problems in schools. (P7N.Q5.5)

First would be the personality traits and professional ideas of principals. They would serve as the start of everything in my eyes...namely the values...personality and integrity [...]. Secondary would be professional capabilities, now capabilities of curriculum and instructional leadership are highly emphasised [...]. Moreover...it would be public relationship ability [...] I used to [...], whenever I saw [...] a principal of this type, I would disdain him very much [...] as he used to drink with people everyday. But after I became a principal of the school, I began to feel that it is also a kind of important ability for principals to obtain big funds or donations for schools just through pleasant and happy meetings (P2K.Q5.5)

Principals should be mainly responsible for work relating to implementation of policies [...] during the implementation of policies the most important things would be leadership and communication skills [...] personality traits [...] namely a kind of love and empathy would also be rather critical. (A1K.Q5.5)

And also public relationships [...] principals' curriculum leadership...and instructional leadership. (A3K.Q5.5)

It is also important to build up the atmosphere of the organisation [...]. When schools can work collectively and collaboratively their strengths are very powerful (A4C.Q5.5)

As for students [...] their attainment [...] has not been emphasised yet. (A5N.Q5.5)

7.1.7 Appraisal standards

On each of the items concerned with setting up appraisal standards, whether they might to be constructed to assist principals to improve deficiencies or promote professional development (Q16), or to carry out principal selection/rewards (Q17), respondents produced scores with means between 3.01 points (application of standardised appraisal standards to all t principals, Q16.3) and 3.38 (adopting both standardised and individual appraisal, Q16.1),

again without significant job type differences. Some interviewees indicated that performance standards should be set both in accordance with essentially uniform requirements for every principals and different standards which took into account the environment and context of each individual school:

I think that we should take account of both the display of performance results and the process in which efforts are made to achieve such results [...] (P1K.Q5.7) Using a minimal, uniform standard and then applying relatively discrepant ones taking into account the limits of environment, conditions and competencies between different schools. (A1K.Q5.6)

If a uniform standard is to be used it should be a minimal standard, while other standards should be applied in accordance with the different conditions of each school. (A4C.Q5.6)

The lowest standard is to set basic performance levels for a principal. For example, for my own teachers, I must attend their wedding ceremonies or funerals. And this should be the lowest standard. For my direct superiors, I must attend such events as well. And this can be also counted as a lowest standard as it is essential to human relationships [...] But given that I need to go out soliciting contributions at noon each day, which is very hard for me to do, some more weight should be given here [...] I think it would be OK for me to just fulfil my own duties . (P2K.Q5.6)

However, if performance management is conducted with an eye to improving performance, appraisal standards should allow for conditions in individual schools and focus on the effort and contribution of principals in that context. Uniform indicators or standards should not be adopted if the results of appraisal are to be fair:

Currently, the greatest problem associated with the appraisal of principals lies in the use of uniform standards, where indicators or criteria for judgment are all the same, so that real improvement arising from principals' efforts can hardly be reflected...thus I feel that relative standards should prevail over those of uniformity because standards of uniformity may have excluded allowance for

the different backgrounds and standpoints of schools [...] In cases of principals assigned to very good schools whose performances remain fine even if they do not make any progress, it will be very unfair (A5N.Q3)

I believe that an appraisal won't be objective if it is conducted to only look at your results rather than at what behaviours you had at the start [...] So before a principal comes to office it is requisite to list the basic conditions of the school, pupil attainment, performance of teachers and the original performance of school and making comparisons with such data after four years of school operation [...] But these are not available now, appraisal just looks at your achievements, not at your efforts. (P9NQ3)

as each school would have its own size, features and prospects for development, each school should evaluate its performance in view of its own targets of school management. So I think that standards should not be uniform. (P4C.Q5.6)

the purpose of principal performance management should help principals to review where their deficiencies exist in running schools. So I would tend to agree with standards based on specific conditions and environments, where focus should be laid on offering advice to principals so that they can make improvement, rather than just prove that they are at a distance from my own targets. (A5N.Q5.6)

7.1.8 Preparatory data collection methods and tools

Respondents tended to agree that data collection methods and tools should be completely designed in advance (Q18, $m=3.64$), with no significant difference of view between those in different posts (Appendix E). However, some methods and tools used in principals' appraisal in many local government areas in Taiwan were either oversimplified or overly dependent on simple rating scales, insufficiently planned or explained and swiftly executed (see Section 4.4.3), affording little useful information:

I think that both methods and tools of appraisal need to be prepared in advance

[...] we must have a clear idea of indicators of appraisal. Also, we must be advised in advance of how appraisers will gather data and what data they would expect us to provide. Otherwise, if they come and ask me to provide such data. suddenly I would have no way to give them the information right away. Based on your experiences, do you think my appraisal scores will be affected in this situation? This would be unfair. (P6C.Q5.7)

(Now) time for principal appraisal or school evaluation is too short. If it is too short then what you can find would all be of superficial validity and you will have no way to acquire deep insight [...] Usually appraisal lasts for half a day, only even about three hours! (P5C.Q3)

7.1.9 Other preparatory work and ancillary measures

Respondents again tended to agree, without difference between posts, that prior to the implementation of policies, explanatory meetings, with a relevant instruction manual, should be held (Q19, m=3.59) (Appendix E). Especially if the concept of PPM was to differ from usual appraisal the trust of principals should be first gained and they should be made to feel that they were being respected:

After the overall design is completed it is necessary to hold an explanation session prior to its commencement so that everybody can understand how this set of systems will be implemented (A1K.Q5.8).

As a lack of understanding of the system will create a lot of difficulties as to its fulfillment [...] it is possible to provide complete written data concerning the plan via an explanation session, a lecture or a discussion (P4C.Q5.8)

so that principals will not panic psychologically [...] and will have psychological preparation (A3K.Q5.8). It is very important to communicate with principals and thereby eliminate their disquiet (A4C.Q5.8)

Interviewees also referred to other, ancillary measures to be taken prior to implementation of policies involving positioning of policy targets (S6C.Q5.8),

establishment of indicators and standards of appraisal (A1K.Q5.8), design of various appraisal forms (S6C.Q5.8), training of external advisers (A4C.Q5.8, P2K.Q5.8), policy legitimisation (P1K.Q5.8), pilot schemes (P1K.Q5.8; P6C.Q5.8; P8N.Q5.8), relevant measures to provide rewards and encourage professional growth (P2K.Q5.8), financing of expenses for implementation (P6C.Q5.8; S1K.Q5.8), as well as the importance of implementing teacher performance management simultaneously (S8N.Q5.8) as means of exhibiting principals' effectiveness. Some interviewees thought that different models of PPM would be applicable to schools of different types and that flexibility should be allowable in this regard, as long as policy purposes could be achieved:

Different models should be available in schools of different types, while flexible means should be allowed. It is all right that there should be a set of rules in the system but there should also be alternative ways. It is inadvisable to rigidify everything and if the whole system becomes rigid there will be no way to alter it. So whatever the model is it must allow for different types of schools if it is to survive [...] Otherwise when the policy is announced it will vanish as usual (P7N.Q5.8)

7.2 How Implementation Should be Carried Out

This section aims to analyse the views and reactions of participants concerning various problems of implementation elicited via Questions 17-43 of the questionnaire (see Appendix A) and the corresponding items Q6-Q6.7 on the interview schedule (See Appendix C).

7.2.1 Performance agreement

Respondents across post categories did not generally agreed with the notion that principals should sign performance agreements with their local education authorities on the subject of performance objectives during their four-year term (Q20, $m=2.85$) (Appendix E). Such ambiguity was evident in interview responses; some approving of the concept while others argued that signing a contract might be only triumph of form over substance. Some interviewees who agreed with signing agreements mainly believed that it would signify their commitment and responsibility for the future operation of their schools. As such, it would represent both a kind of pressure and a driving force. Performance agreements of the sort found in current principal selection, in which candidates uttered beautiful visions for the school about which they were likely to do nothing after they were appointed, were to be avoided. They also admitted that if they were to sign agreements they would be somewhat reserved about contractual objectives, which would need to be relatively pragmatic to allow for flexibility as time went by and contextual change took place:

I would agree with the signing of agreements so that principals can be motivated to assume responsibilities for this school (A1K.Q6.2)

So that the principal will not give a sputtering lecture at the time of principal selection but accomplish nothing in the end. This can also be regarded as a kind of honesty (A4C.Q6.2)

The principal will have to work whole-heartedly whenever he signs an agreement. But this would be positive pressure...As far I am concerned, I can well accept this practice but I will be reluctant to set up performance targets therein so that I will not have to bear too heavy a burden in the coming four years (P1KQ6.2)

I would support the signing of an agreement but the agreement should...be adjustable and amendable [...] perhaps [...] the agreement can not be finalised due to environmental changes. So it needs to be transformed [...], and to be flexible in this way [...]. (P6C.Q6.2)

Others saw no need to sign agreements, as objectives within relatively long four-year agreements might change in accordance with school circumstances. If principals had to focus their attention only on accomplishing these objectives, ignoring others, the values and significance of school management would be lost. Moreover, if no more resources were appropriated or teacher support was not secured, no targets could be achieved even over four years. And it might happen that when principals simply wanted to reach their aims but neglected the means, negative effects could be produced:

It will be too formal to sign an agreement [...] the negative effects are [...] you may be distrusted by others when you have to make some adjustments in the process, or you fail to do something you cannot expect. Or even [...] in the process there may be some events where unscrupulous methods may be used to achieve the main targets. (S4C.Q6.2)

Achieving contractual objectives [...] is not simply the principal's own issue [...] the quality of teachers and students, sometimes it is really difficult to keep these under control [...] A period of four years is rather long and I would rather set up objectives each year and then try to achieve them (S8N.Q6.2)

In this way, principals would experience greater dissatisfaction with arrangements [...] I am selected to work here, and have to make such promises but after I start to work at this school [...] some promises are impossible to fulfil [...] thus, principals will have to bear even greater pressure [...] Therefore, the requirement to sign an agreement may cause greater opposition from principals [...] I think it would be acceptable to assist principals to carry out their work in accordance with annual performance objectives with the help from such a supporting system. (A3K.Q6.2)

In the event that an agreement needed to be signed, some interviewees proposed that it should occur after principals came to office at their new schools. It was quite appropriate to put forward an agreement in the first year of principals' terms. Indeed, it might be possible to require principals to propose their own visions and objectives for their schools in their preliminary school development plans before selection, to be resubmitted for agreement as actual plans during the first term, only after they had discussed matters with colleagues. Then, such an agreement could be fulfilled in accordance with annual performance objectives that they would be required to set up with advisers and amended, if and when necessary. In this way, principals can be prevented from formulating simplistic or less challenging objectives, worried that they might be unable to achieve those set at a higher level:

Now we are asked to prepare a School Management Plan in the process of principal selection [...] but whether I should fulfil every target at this school, it seems there is a great discrepancy here [...]. Actually if I am allowed to learn about the school and communicate with other staff after I come to it [...] and then make revisions, it would be practicable (P5C.Q6.2)

The agreement [...] is tantamount to my own plan for school development [...] However [...] about the real development of this school, I still have my own thoughts, which may be changed a year later [...] If I can seek advice from advisers there will be possibly more clear directions for me (P9N.Q6.2)

The time of signing should be in the first year of my tenure, probably by the time when I finish school self-evaluation and make a common commitment with school colleagues. (S6C.Q6.2)

I would accept the agreement but should it be handled formally? The culture of Taiwan could turn the agreement into trouble for principals. Even if a principal can carry out the agreement completely, outside people could still compare him/her with others [...] thus creating biased pressure [...] It is also a risk to sign agreements before the four year term of the principal as principals cannot acquire a real perception of the school, so it should be signed [...] in the first

year (A2K.Q6.2)

7.2.2 Performance objective setting

Six questions related to the setting of annual performance objectives for principals: time of objective setting (Q21), sources of objective setting (Q22), ways of deciding objectives (Q23), setting basic items (Q24), number of performance objectives (Q25) and principles of setting objectives (Q26), producing responses with means of not less than 3.11 points, with no significant difference between respondents in different posts, except for Q22.2 and Q23.1 (Appendix F).

7.2.2.1 Time of objective setting

Respondents on balance agreed that principals should set annual performance objectives at the beginning of each academic year to guide their efforts (Q21, $m=3.26$), interviewees also believing that incumbent principals should find no problem when required to put forward annual performance objectives before each academic year, though for newly appointed principals it was suggested that they should be subjected to performance management only from the second year of their terms while their first PPM cycle is two year (see Section 7.1.3). If newly appointed principals were required to provide School Management Plans at the time of selection they would inevitably tend to lack deep insight into their problems. A diagnostic school self-evaluation with school colleagues during their first term, affording understanding of their schools' strengths and weakness, would be more appropriate:

When newly appointed principals enter into a new school, they may need to spend some time to learn about the schools and set up school development objectives; so that to implement these objectives should begin from next

academic year. [...]. (P4C.Q5.2)

It would be appropriate for the principals to first carry out an overall analysis of the schools and then on the basis of currently existing problems to set up objectives for their efforts before every academic year. (A5N.Q6.1C)

In my view, as performance can not be achieved only by the principal alone, especially a newly appointed principal who has just come to the school and can not be immediately aware of the problems existing in the school, so it would be quite helpful for the principal to set up annual objectives having first organised a school self-evaluation by way of self-diagnosis, inviting school teachers, staffs, deans and parents to attend this event, thereby learning where the strengths and weakness of the school stand and then forming a common sense about how to use its advantages to complement its deficiencies. (S3K.Q6.1A)

7.2.2.2 Sources of objective setting

As to sources of performance objective setting (Q22), respondents tended to agree that all five items should be taken into account, ranging from 'development objectives set by schools' (Q22.3, $m=3.56$), previous year's performance improvement objectives (Q22.4, $m=3.40$), education policy objectives to be set by local government (Q22.2, $m=3.38$), principals' professional development objectives (Q22.5, $m=3.32$), to education policy objectives set by central government (Q22.1, $m=3.23$). The stress laid by EdAs on the option 'education policy objectives set by local government' was significantly higher than is that of JHSPs and PriSPs, who more strongly prioritised school development and improvement objectives.

Interviewees held much the same views, though some believed that objectives should be established having consideration for the demands of parents and the community, 'taking students as the principal axis [...] and teaching improvement as the focus', as P9N claims below:

As national education falls within the responsibility of local governments, educational implementation plans of county and city governments should serve as a very critical basis. Besides, school development plans and the community prospects for schools would also function as a very important source. (A5N.Q6.1B)

I would personally prefer to lay emphasis on school problems by which to set my own objectives as the quality of school can be enhanced only through solving problems currently facing the school [...] I would also take my students as the principal axis of my work and teaching improvement as the focus of my operation to find out the problems of our school and set up my own objectives in view of these problems. (P9N.Q6.1B)

7.2.2.3 Ways of deciding objectives

Respondents on balance agreed that performance objectives should be set, first 'By advisers and principals after discussion' (Q23.2, $m=3.26$) and next 'By principals after consulting colleagues' (Q23.1, $m=3.20$), followed 'By report to local education authorities in charge for approval' (Q23.3, $m=3.10$). PriSPs were significantly more in favour of 'By principals after consulting colleagues' than EdAs. Responses from interviewees were similar, tending to indicate that principals should first base them on diagnostic school self-evaluation, conducting discussions to reach an initial consensus with colleagues before confirming final decisions with advisers. However, principals should still be the final decision-makers in the setting of objectives, advisers playing the roles of consultants seeking consensus:

Objectives would definitely not be based only on the imagination of the principal but would involve group discussion processes. Even though objectives may be set for principals [...] without the joint efforts of teachers and students objectives are impossible to realise. Therefore principals have to discuss these objectives with teachers or even with other relevant personnel, parents or residents in the community and then make final confirmation with advisers where objectives would be enhanced if the advisers considered them too low. (A4C.Q6.1C)

Principals should first understand the expectations of parents and their colleagues, senior managers and teachers and then proceed to make final decisions. But I don't think that principals' objectives should necessarily be approved by parents or school colleagues as sometimes everybody would have their own status and viewpoints [...]. So it is still principals who should make final decisions [...] while principals and advisers should be deemed an optimal point of balance in discussion between both sides (A1K.Q6.1C)

7.2.2.4 Setting basic items

In considering what basic items should be regulated in setting principals' performance objectives, respondents rated most highly 'one of the items related to students' performance" (Q24, $m=3.52$), followed by 'one of the items related to principals' professional development' (Q25, $m=3.47$) and 'one of the items related to their annual improvement objectives' (Q26, $m=3.47$). Interviewees also believed that some basic, common items of performance objectives should be regulated while principals were simultaneously allowed to have flexibility to discuss them with their staff, selecting the most preferred, concrete goals for development based on specific features of their schools. Such practices were thought to be both reasonable and beneficial, keeping multiple goals in sight and preventing principals from bearing too heavy a pressure:

I think, it would be very considerate to regulate some basic items for principals, to put them in their annual performance objectives at the time of setting. In this way, principals are unlikely to avoid important affairs, instead focussing on trivial things so that everything related with the school can be taken into account (A1K.Q6.1D)

I don't consider it necessary to set up too many items [...] First, if there is no enhancement of pupil attainment you cannot say that the school is running really well [...] Second, it would be nearly OK to include such items as areas of principal professional development, school development or improvement and

current key education policies and then ask principals, school teachers and advisers to decide concrete objectives together. It would be unsuitable to cover too many areas resulting in a great pressure on everybody and cause mutual confusions between all parties concerned.(P5C.Q6.1D)

7.2.2.5 The number of performance objectives per year

In considering the number of objectives to be set (Q27), respondents tended to believe pragmatically that the primary option should be 'decided after consulting with the adviser' (40.8%), rating other options, 3-5 items(30.0%), 5-7 items (15.3%) and 1-3 items(13.9%) as less individually desirable. Some interviewees expressed the view that, as conditions in schools varied greatly, so would the the likelihood of being able to actualise objectives. Principals and their advisers should be allowed to discuss and form a consensus over objectives other than the most basic. If they were set too high principals would be unable to realise them, if too low, advisers will ask that they be adjusted. There was no need to set a great number of objectives and performance achievements would be exhibited as long as a gradual realisation of objectives was accomplished each year:

I think, objectives should be based on specific conditions which could vary in each [...] besides, the features of each school for development could be different and performance goals to be set diverse. So the number of objectives should vary across different schools (P6C.Q6.1E)

I feel that [...] it is needless to stipulate how many goals to be set but OK to allow principals to discuss them with their advisers. (S4C.Q6.1E)

It's not easy to specify the number of objectives as sometimes an important job can be as difficult as several other jobs put together, so that there will be a dilemma in the determination of specific objectives. Thus it would be best to segment objectives in advance so that variation in difficulty is not be too great between various ones. Such work should be done through negotiation between

advisers and principals. It is acceptable to include only the basic items and let principals to decide all others (A1K.Q6.1E)

7.2.2.6 Criteria for objective setting

Respondents generally concurred with all five principles, most strongly with 'specific' (Q28.1, $m=3.61$), then 'achievable' (Q28.3, $m=3.57$), 'relevant' (Q28.4, $m=3.47$), 'measurable' (Q28.1, $m=3.38$) and 'time-limited' (Q28.5, $m=3.38$). Interviewees also agreed that objectives should be specific, flexible, and combine with school development objectives. In the event that an objective is unattainable within one year, it should be broken up and rearranged as a series of specific, midterm objectives:

Specific is highly important, yet whether the setting of objectives can accord with the development goals of the school and whether setting can be based on its specific conditions are very critical. [...] Initially, I feel that it is necessary to achieve the setting of objectives and whether the setting is challenging will probably depend on actual operation. (A5N.Q6.1F)

I think that it should be specific and definite while the goals for each should be definitely fulfilled so that we can know whether the plan has been completed. But if it is impossible to attain an objective as it is too great then we can separate the objective into the goal for the first year, the goal for the second year [...] so it could be very definite. (P5C.Q6.1F)

7.2.3 Counselling and feedback

Questions with respect to counselling and feedback on principal performance included ways of counselling (Q29), frequency of interaction (Q30), principals' reflective portfolios (Q31), sources of feedback (Q32) and interview processing (Q33) and showed relatively lower means of at least 3.04, with no significant differences between respondents in different posts.

7.2.3.1 Ways of performance counselling

Most respondents agreed that performance counselling should be focused on continuous communication and feedback between advisers and principals (Q29, $m=3.55$), while interviewees also tended to believe that only through such continuous communication and dialogue between advisers and principals could real assistance be provided to facilitate principals' performance improvement and self-development, enhancing the value of a PPM system. Prior to counselling both advisers and principals should reach consensus on their annual plan for conducting periodical discussion and interaction. Advisers should not only have dialogue with principals but facilitate it between principals and other helpful people, best done in conditions of mutual trust:

If we wished to help principals to make progress, it would be very important to have mid-year counselling and feedback. So by mid term advisers should give some advice to principals so that the latter will be able to obtain real-time feedback and make some correction otherwise, just in case it may be too late when by the time principals discover their problems after the whole year was over. So mid-year counselling is quite important. (A1K.Q6.3A)

and especially a continuous dialog, I feel, will be a critical part of this process. (A5N.Q6.3A)

we should enable principals to have trust in interaction with their advisers so that they can let out the questions on their mind and in this way [...] it will be very effective (P9N.Q6.3A)

Prior to the start of performance counselling the adviser should [...] have made a deal with the principal on performance objectives for this year and then...should decide what he needs to talk about with the principal every month and there should be a subject for each month so that effects can be achieved. (A6M.Q6.3D)

The principal needs to have some mechanisms of dialogue [...] Dialogue should not only be shared between principals and advisers [...] the advisers should have the duty of facilitating dialogue [...] what the principal lacks now, they should find the relevant person to talk with (A2K.Q6.3A)

7.2.3.2 Frequency of interaction

Almost half of respondents felt that advisers and principals should meet 'at least once a month' (43.0%), while others indicated that frequency should be 'decided through consultation between both' (25.5%), the remainder selecting 'at least twice a month' (17.5%), 'at least once every two months' (11.8%) and 'at least once a week' (2.2%). Interviewees tended to the views that both parties should seek the appropriate interaction that enabled them to acquire deep insight into the operation of the school, but that overly frequent encounters might become a burden to both. Interaction could be either periodic or nonperiodic, the latter directly fixed up by both parties via the network or phone calls, in light of actual demands, while periodic ones could be similarly arranged once or at least every two months. In terms of the two semesters in the academic year in Taiwan, it was possible to consider arranging interactions once at the start, in the middle and at the end of each:

I think that the lightest regulations should be made for interactive communication between both parties. For example, how often they have to meet to make an observation and have a professional discussion (P1K.Q6.3A)

In the event of nonperiodic interaction, it is possible to offer counselling service at any time by telephone and so no provision needs to be made. If it is required to come to school and give counselling periodically, I think it would be OK to come once a month. (A3K.Q6.3B)

in this way can we achieve the effects and function of communication and dialogue (A5N.Q6.3B)

In fact, it is not important to set out for how many months there will be an interaction event but time must be controlled and efficiency must be attained in the process of counselling and coordination [...] so I will consider the option of once every two months, namely 5 or 6 times a year. (S1K.Q6.3B)

I think it unnecessary to be too frequent as interaction of this kind could become a burden. But considering that principals or advisers need to communicate with each other to understand school operations or principals may wish to have counselling advice from advisers I suggest if we can consider holding interactive communication three times each semester, at the beginning, middle and at the end of the semester, when both advisers and principals can discuss specific time arrangement. In this way, there will be a frequency, a periodical interaction every one or two months, which should be enough. (S4C.Q6.3B)

7.2.3.3 Principals' reflective portfolios

Respondents tended to accept that attention should be focused on reflective portfolios throughout PPM counselling processes (Q31, m=3.33), interviewees clearly indicating that paying more attention to principals' self-reflective and process portfolios would be greatly helpful in enhancing their operational performance, given a belief that only those principals who can introspect would seek to make improvements. If principals could focus on their performance objectives in constructing process portfolios they might not only serve as sources of data to be shared and discussed with advisers but be of use in reviewing future performances. With better ICT capability, principals could manage these portfolios more easily, providing an easily shared critical database for self-reflection and interaction with advisers:

I think it is very needful to carry out self-reflection. Only when a person can introspect would he be able to carry out the improvements. (A1K.Q6.3C)

Now, we rarely have to hand principals' process portfolios, especially records of their self-reflections at the time of appraisal. So we cannot see what they have done, only listen to what they say. (A5N.Q6.3C)

If we take a periodic meeting as the start of a cycle it should cover the following processes: first, the principals should focus on objective setting, recording what has been achieved and related problems on a simple form, so that they can understand how they have operated and. Next, they should show this to their adviser who would write down recommendations in feedback to the principal. Then the principal would place such records in their own process portfolio. With such periodic interaction that allows data sharing, a new way of thinking may be created to improve their performance and set the next targets. Then the next cycle starts. (P1K.Q6.3C)

When an objective is set too high or too low [...] it may be...amended by introspective review of portfolios or by feedback (P4C.Q6.3C)

These [...] records or self-reflection can be used as references for next year or for others (P7N.Q6.3C)

If such information is managed using information technology [...] I think there would be no problems given the current capabilities of school principals. (P5C.Q6.3C)

7.2.3.4 Sources of feedback

Respondents generally acceded that principals should have regard to feedback from various sources (Q32, $m=3.42$), regarding staff (Q33.2, $m=3.53$) as the most important, followed by students (Q33.3, $m=3.46$), parents (Q33.4, $m=3.45$), superiors (Q33.1, $m=3.27$), community (Q33.5, $m=3.27$) and principals of other schools (Q33.6, $m=3.03$). Interviewees indicated that:

Feedback on data collection [...] can be gathered by the adviser as well as the principal. But it will be hard for advisers to collect data from administrative departments, teaching departments or parents. So feedback information should mainly be gathered by principals in their process of self review. Then it can be sorted out and provided to advisers for the purpose of mutual dialogue and discussion. (P4C.Q6.3D)

So, the collection of such feedback information should mainly fall to principals and they should actively inform advisers periodically of certain significant events and affairs in their schools. Then advisers can provide some counselling advice based on data provided by principals and their own observation of the schools or information mailed from the schools. So even though advisers sometimes may not be able to come to schools they can well provide guidance for them or understand the dynamic state of schools by means of such information. (A1K.Q6.3D)

Interviewees also suggested that principals should seek to reach consensus with their advisers as to sources of feedback, preferably of the '360 degree' or multiple-source type, not only from advisers but school administrative teams, teachers, parents, students and superiors:

I feel that [...] it is inadequate without common consensus at the start as to methods of data collection at the time of appraisal [...] So everything needs be completely planned beforehand, for example, how to assess performance objectives, what data is to be gathered and from whom to gather it. Over these, there should be a consensus in advance as the best way to avoid disputes [...] In terms of my own experience, advisers' feedback is a source along with the school administrative system, which I would divide into four groups, including the administrative group, teaching group, parental group and pupils. It would be optimal if feedback could be considered from these four groups at the same time. (P4C.Q6.3D)

What can be employed is the 360 degree feedback technique prevailing currently [...] which allows principals to analyse from different views. (A3K.Q6.3D)

7.2.3.5 Interview processing

Respondents generally thought that advisers should provide an analysis report to principals for reference, to be kept in their personal portfolios (Q34, m=3.33). Interviewees said that such a real-time analysis report after counselling would not only allow principals to get immediate feedback but also

clarify results of mutual discussions. Incorporated into principal portfolios, it would also allow them to understand the process of their own growth and serve as critical information for end of the term performance review, hitherto neglected in Taiwan::

With communication and dialogue a consensus should be formed [...] analysis reports can help principals identify problems and obtain advice. It would be clearer if findings to be communicated can be converted into written form (P8N.Q6.3E)

Currently, no record is left after appraisal is completed so that when an adviser completes counselling he/she should provide a principal with an analysis report immediately to be incorporated into his personal portfolio. Only in this way can the effect of immediate feedback be displayed. (A5N.Q6.3E)

and the principal can clearly see the process of his own growth (P1K.Q6.3E)

and locate problems right away. Otherwise, by the end of his term, there will be no point in providing him with counselling. (P7N.Q6.3E)

If the interaction is periodic, the adviser can be required to prepare a simple counselling report after each consultation with the principal. It can be then submitted on A4 to the principal for filing into his portfolio as a memo. If the interaction is not periodic, whenever principals actively seek advice from advisers, they should record the results themselves. In the event that advisers take the initiative in compiling data, records of their observation should be provided in the form of feedback to principals as records for their portfolios. If so, the effect of counselling would be surely better. (P6C.Q6.3E)

7.2.4 Performance appraisal

There were three questions with respect to performance appraisal, concerning ways of conducting it (Q35), methods of data collection (Q36) and tools of data collection (Q37), overall responses giving means of 3.23 points or more, with significant difference by post with respect of the former

(Appendix E).

7.2.4.1 Ways of conducting appraisal

Respondents generally agreed that principal performance appraisal should be conducted by advisers in light of annual performance objectives before the end of each academic year (Q35, m=3.28). Interviewees also indicated that while there were few plans in Taiwan to conduct training of appraisers those appointed might have very limited knowledge of the objects appraised, so that the quality and results of appraisal would be open to doubt. Ideal candidates as appraisers would be those who had long observed and interacted with principals. However, for summative purposes or when necessary to compare results, such as in principal selection, either inspectors or BOE section chiefs might appropriately serve as second appraisers. They would be in a position not only provide relatively complete information about principal performance, improving the objectivity and fairness of appraisal but also to help the BOE to know about the extent to which performance counselling had taken place between advisers and principals:

As for current appraisals in Taiwan [...] the even more serious problem is that...the quality of appraisers is problematic (A6M.Q3)

the appraisers are usually composed of scholars, experts, administrators, parent representatives and teacher representatives. How could they look at issues basically? And how can they know about the school? I have doubts about these [...] Some appraisers may have different time demands from scholars or experts and may not be able to accept appraisal trainings (S2KQ3)

I feel that performance appraisal should be predominantly by advisers who have long time been involved in school affairs and are thus more aware of principals' performance [...] For summative purposes of appraisal, besides advisers, it would be ideal to invite relevant local educational authority staff to

visit together (P4C.Q6.4A)

this can enhance the credibility and validity of appraisal (P6C.Q6.4A)

For instance, inspectors or section chiefs can collaborate with advisers to visit schools together for review or appraisal [...] because advisers...can be only aware of the implementation of some schools' objectives [...] the information they gained can be only provided by schools. With the involvement of administrators they will be able to have deeper insights into the overall, big environment. (A1K.Q6.4A)

and also enable officials of the Bureaus of Education to know about the interactions of principals with advisers in this year. (P6C.Q6.4A)

7.2.4.2 Methods of data collection

Respondents regarded all five methods of data collection that might be adopted for performance appraisal as relatively important (Q36), favouring observation of principal behaviour (Q36.3, $m=3.40$) as most important, followed by principal self-appraisal (Q36.1, $m=3.32$), individual interviews with stakeholders (Q36.4, $m=3.32$), principal's portfolio (Q36.2, $m=3.26$), and questionnaire survey (Q36.5, $m=3.23$). Interviewees revealed that current, on-site appraisal in Taiwan usually included school briefing, observation, data consultation, interview, and symposiums, with an extremely biased focus on data consultation, which took appraisees a great deal of time to prepare and a neglect of observation, deserving a great deal of criticism. They contended that methods of data collection should be appropriate to appraisal indicators, while great emphasis should be laid on process data which may include records of observation. Advisers and principals should reach agreement over such methods at the start of the year:

Our frequently used methods in data collection, such as briefing, on-site observation, interview, data consultation, and questionnaire, or even

symposiums [...] should be mutually integrated, while the specific method can be selected in correspondence with the item of appraisal [...] and data concerning the whole process should be included (A4C.Q5.7)

both sides should discuss [...] how to observe and ways or tools of recording and working out relevant plans when setting objectives at the start of the year. If there is a good plan, process records will not be missing (P5C.Q5.7)

A lot of written materials may have been embellished and therefore cannot represent the real principals' performance, for this reason, such data deserve further discussion. (P8N.Q5.7)

while we had responded that there is no need to prepare so many materials for appraisal and we should focus on actual performance, they (appraisers) still wanted to look at the data when they were here. Therefore, we had to prepare sufficient written data. In fact, those efforts were in vain and we felt **let down**. (P5C.Q3)

Interviewees regarded observation and interview as very important means of data collection believing that if advisers took part in observing critical incidents at school the accuracy of their insight would be greatly improved:

most reliable would be what you see with your own eyes as it is not easy to falsify facts in the process of observation which requires the actual presentation of performances. (A1K.Q5.7)

appraisers should be involved in all important events in the school [...] You have to observe the whole process of school development to understand its intent. If you only look at written data afterwards you will only find results but know nothing about the process. (P5CQ4)

It would be impossible, OK, to carry out an interview only once. The interview may need to continue, with different objectives (P9N.Q5.7)

I feel that there was no sense at all [...] when we carried out the appraisal at schools and had interviews with parents [...] because they were all [...] previously arranged! as they had friendly relationships with the school!

(P2K.Q5.7)

While it can also serve as a useful method, questionnaire surveys of teachers and parents in Taiwan may sometimes fail to reflect principal performance objectively, representing only preferences or aversions, such that it should be treated with prudence. Completeness of data gathered depended mainly on sufficient time being given to its collection. Correct judgment of principals' performances could only be made if based on continuous records of observation taken by advisers and feedback information compiled by principals at ordinary times:

Now principal selection requires preparation of questionnaires for teachers and parents who may sometimes have no real idea of what you are doing. If the principal is a bit more rigid, teachers would be likely to rebound and the questionnaires they fill out would look horrible. So no principal nowadays would have the courage to offend teachers and parents. but the Bureau of Education demands good performances from principals. So it is really hard for principals to work with such a dilemma. (P9NQ3)

Now appraisers would be here only for two or three hours but try to understand the achievements of principals over a period of four years [...] so they could have no way to find out quickly where the advantages and features of principals stand [...] and thus I think that appraisal should last [...] a bit longer [...] (P6CQ4)

It would probably take some time if the appraisers wished to know about the efforts of principals (A4CQ4)

7.2.4.3 Tools of data collection

Respondents tended to concur that the most important data collection tools in principal performance appraisal combined both quantitative and qualitative devices (Q37.3, $m=3.48$), while qualitative records (Q37.2, $m=3.40$) and quantitative tools (Q37.1, $m=3.25$) alone achieved very similar scores. EdAs

favoured quantitative tools significantly more than PriSPs. Interviewees held similar views:

Advisers can frequently observe a school, or have interviews with school staff [...], they should not rely only on quantitative means. Of course, it would be very good to take both the qualitative and quantitative data. So they can also distribute questionnaires to parents, teachers, or students [...] so that they can gather data from multiple viewpoints. (S3K.Q5.7)

they can use simply designed forms to record the process of [...] observation. Besides, they can also adopt structured or semi-structured questionnaires as an auxiliary tool. (A1K.Q5.7)

7.2.5 Performance review meetings

Respondents of all types tended to agree that advisers should hold review meetings with principals within one week of appraisal being conducted (Q38, $m=3.38$) (Appendix E). Performance review meetings also tend to be neglected within the various kinds of appraisal that take place in Taiwan, yet interviewees tended to regard them as a means whereby advisers might not only identify principals' achievements of annual performance objectives but also gain deep insight into schools' problems, while allowing discussion with principals with respect to future improvement. While the main participants in review meetings should be advisers and principals, if both parties agreed, their discussions might well include those core school staff (such as deans of department or project teachers) who would be helpful in giving advisers a better idea of circumstances. Review meetings might be formal or informal provided they reduced the defensiveness of principals, made more likely if discussions were conducted with sincerity and avoidance of criticism:

Now, whenever school evaluation is completed, the data acquired is immediately used for purposes of principal selection, where neither principals

have opportunities to make improvement, nor advisers able to help the principal [...] So I regard it as very necessary for both parties to talk after completion of appraisal to clarify problems needing improvement so that principals can both understand achievement of the objectives they have set up and know how to do to achieve better results later (A5N.Q6.5A)

It is best to have a review meeting in an informal way so that both parties can talk with each other deeply so that the self-justification of principals can be reduced (A1K.Q6.5A)

The review meeting may not necessarily only involve both parties concerned but also some key senior managers or teachers who can play critical roles as well. If principals do not object, they can invite core staff after negotiation with advisers [...] to joint such a review meeting (P4C.Q6.5A)

In this way, they can learn how performances have been acquired on the one hand and can have deeper insights into problems on the other hand (P6C.Q6.5A)

at the time of the review both parties need to be sincere and [...] should tell the truth [...] the advisers [...] should play coordinating and support roles to deliver such messages rather than a criticising role [...] while principals accepting the need for counselling should be rational and willing enough to seek confirmation and clarification of issues with advisers over whether goals have been achieved. Where have they worked well? Where are there the problems? How to improve? (P2K.Q6.5A)

Discussion in reviewing meetings should be focused on four areas, achievement of performance objectives (including professional development), reasons or problems causing failure, feasible strategies to solve such problems, and setting of performance and professional development objectives in future:

Discussion must be focused on issues related to objectives so that they will not be distracted from the main subjects (P6C.Q6.5B)

I would be inclined to place the key points for discussion on how objectives

have been attained by principals, where there are problems and what goals are to be set for the next year. (A5N.Q6.5B)

I feel that to improve the effects of review it is necessary to discuss at the meeting such issues as [...] how objectives have been attained, [...] what problems exist over unachieved objectives, what improvements can be expected in future and how to improve as well as [...] what aspects of principal growth have not been attained [...] and whether further promotion is needed of some principals' capabilities. (S4C.Q6.5B)

7.2.6 Performance appraisal reports

The three questions related to appraisal reporting included deadlines completed (Q39), content and presentation (Q40) and rights of principals to respond (Q41). Responses showed mean scores of at least 3.06 points, with no significant variation between those in different posts.

7.2.6.1 Deadlines completed

Respondents tended to agree that advisers should complete and send appraisal reports to principals within two weeks of review meetings (Q39, $m=3.36$), interviewees concurring:

The appraisal report should be prepared by advisers and confirmed by principals before submission to Bureaus of Education, either party keeping a copy. (S6C.Q6.6A)

I feel that with consensus between both parties it would be ideal to complete reports within two weeks after review meetings otherwise issues are likely forgotten if deadlines are too late. (P2K.Q6.6A)

7.2.6.2 Content and presentation

Respondents felt most strongly that 'a document describing the strengths and weaknesses of principals in words and putting forward suggestions for improvement' was the most important presentational format (Q40.3, $m=3.50$), giving only slightly less importance to 'quantitative profiles of different performance dimensions' (Q40.2, $m=3.29$) and less again to 'providing an overall grade or mark (Q40.1, $m=3.04$). Some interviewees said that report contents needed to be specific and definite, involving descriptions of overall performance achievement processes and understanding gained at review meetings concerning objectives, strategies, counselling, achievement, problems, feasible strategies for problem solving, prior objectives to be improved or still achieved and resources needed, along with recommendations to relevant organisations and personnel:

While it is necessary to inform the principal of where problems exist and what to do, contents must be very specific in written texts. So some comprehensive suggestions need to be provided and there should be no vague or ambiguous advice as at present! (P7N)

The most important content would be description of processes of achieving overall performance objectives (A1K.Q6.6B)

report contents should cover facets of what had been discussed by both parties in the review meeting. For example what are the principal's annual objectives? What strategies will the principal adopt to realise his objectives? How will the whole process of counselling be carried out? What problems will occur in the middle of the process? How will these problems be solved? What problems still remain unsolved? What has been achieved since the last review of performance objectives for the whole year? What objectives have not been achieved? Why not? What are the performance objectives and plans for the next year? What resources should educational authorities provide? What advice could be provided to other units or personnel? (A6M.Q6.6B)

7.2.6.3 The right of principals to respond

Respondent tended to agree that principals should have the right to express personal comments in written form within two weeks of receiving reports (Q41, $m=3.44$). Interviewees tended to concur, some adding that, having received any demurrals to reports, advisers should consider whether it was necessary to make amendments. In the event of continuing disagreement, principals should be allowed to attach comments, or submit them to advisers, since the purpose of counselling was to provide assistance rather than create confrontation. Reports could become formal only upon signatures by both parties:

Before a report is submitted to the Bureau of Education, a copy should be sent to the principal so that he can have time to attach explanations which advisers can further consider, deciding whether it is necessary to make additional amendments. Later, the report can be formally submitted to the Bureau of Education. Also, on the last back page of the report there should be the signatures of both parties signifying their final confirmation (A1K.Q6.6C)

Whenever there is disagreement opinions or comments can be written by principals and listed as attachments to the reports [...] or issues listed for discussion by both parties. This would be ideal because the most important role of advisers is to help them make school affairs better, rather than creating conflict. (P4C.Q6.6C)

7.2.7 Confidentiality and due process

There were five questions concerning confidentiality and due process, treatment of complaints (Q42), appeal procedures (Q43), confidentiality and management of data (Q44), restriction of data consultation (Q45) and who shall access PPM data (Q46) responses to which showed means of at least 3.20 points, with any no statistical significance between respondents in different posts, except for Q40, Q42 and Q43.1 (Appendix F)

7.2.7.1 Treatment of complaints

Most respondents agreed that principals should have right of appeal regarding appraisal reports (Q42, m=3.45). Some believed that where PPM was conducted mainly to provide assistance and improvement and both parties had gone through a review meeting process principals were very unlikely to be discontented. But, in the event that performance appraisal was integrated with performance rating or principal selection, they should be entitled to appeal. Although principals were given the right to make responses to appraisal reports they should not be allowed to make appeals simply to for their own benefit, where they were no more than showing dislike of appraisal, or where their communication with advisers did not work. Completed PPM systems should always have a complaint appeal system on standby:

If appraisal reports were indeed used as reference for selection, it is absolutely necessary to build up channels for appeal. As just mentioned, reports should take effect upon the signature of both principals and advisers, signed only when both of them agree on it. But if there is disagreement here and no compromise emerges there may be complaints and principals should be allowed to time for making an appeal. (A1K.Q6.7A)

if performance appraisal is conducted simply to assist principals, then I feel there is no need for it to be that troublesome, with a very low possibility appeals [...] However, in a complete system, I think it would be proper if the channels of appeals could be embraced. (P1K.Q6.7A)

7.2.7.2 Appeal procedures

Respondents tended to agree that local education authorities should hold Appeal Committees to review complaints from principals (Q43, m=3.37), both JHSPs and PriSPs scoring significantly higher than EdAs. Interviewees were insistent that if it were necessary to set up an appeal system, Bureaus of

Education should serve as its base and that at least half of reviewers should be scholars, experts and impartial citizens so that impartiality might be guaranteed:

Now it is quite difficult to establish extra agencies to deal with appeals where Bureaus of Education still intervene and handle complaints. For instance, the inspectors office can well establish an appeal committee [...] and invite other objective and impartial people to join in this organisation, for example, with impartial members, scholars and experts occupying at least half of the total seats. (A1K.Q6.7B)

7.2.7.3 Confidentiality and management of data

Respondents strongly agreed that PPM data should be properly and confidentially managed (Q44, $m=3.59$), some interviewees believing that if regulations assuring data confidentiality had been made, both advisers and principals would be likely to interact in confessional mode. In their absence, we might expect their mutual communication to be very reserved. Moreover, if appraisal data was to be used for purposes of principal selection, it should be presented by the Bureau of Education in abstract form rather than in the original. Counseling and appraisal sometimes inevitably involved sensitive private data which Bureaus of Education should keep properly, including confidentially, setting a data retention period and deadlines by which data should be destroyed to avoid unnecessary harm to principals:

If school evaluation is conducted only for the purpose of principal selection, the whole process should be objective, prudential and private. Since these qualities are neglected at present, unknown to the school or principal, relevant information was made open to everybody in this city [...] when official results were not formally publicised, media correspondents had already made such data public. As a result, before the school had any opportunity to make improvement one or two hundred pupils had already transferred to other schools. (P2K.Q4)

If confidentiality can be ensured advisers would be more willing to write down the truth. And if data are freely publicised they will be reserved because they are afraid that certain negative effects can be produced for principals. If data needs to be public for principal selection in the end, the Bureau of Education should edit and present only its conclusions in the form of abstracts and keep details private. (A1K.Q6.7C)

because such materials would involve personal realms they cannot be publicised as a whole. So I think that educational authorities should be responsible for managing these data (A5C.Q6.7D)

set the deadlines of confidentiality and indicate how long before such data should be destroyed. (P1K.Q6.7D)

7.2.7.4 Restriction of data consultation

Respondents agreed almost as strongly that PPM data should only be viewed by those legally permitted to do so (Q45, $m=3.56$), PriSPs believing so significantly more strongly than EdAs. Interviewees also believed that consultation procedures over PPM data should be established in accordance with the Administrative Procedure Act in order to protect the personal rights of principals. One indicated that:

Suitable prescriptions have been made available in the Administrative Procedure Act. There has been a system as to what data can be referenced by outside people and what data cannot. I think it's possible to base it on the prescriptions of the Act in building up data consultation procedures. (A1K.Q6.7E)

7.2.7.5 Who should access PPM data?

There was very considerable agreement that the persons listed in Question

46 should have access, ranging from principals who have been appraised (Q46.1, m=3.56), principals' line managers (Q46.2, m=3.51), principals' advisers (Q46.3, m=3.49), members of Appeals Committees (Q46.5, m=3.30), members of Principal Selection Committees (Q46.4, m=3.21) and other persons legally permitted (Q46.6, m=3.20). JHSP and PriSPs chose 'principals who have been appraised' significantly more than EdAs. Interviewees also indicated that, except principals or advisers, the immediate superiors of principals were the stakeholders most entitled to directly consult PPM data. That available to members of Principal Selection Committees should be well selected and carefully compiled by the Bureau of Education, in cognisance with the demands of appraisal ethics and avoidance of harm to principals:

Those who are qualified to consult the data would probably be superiors at the Bureau of Education, principals and advisers. (P4C.Q6.7F)

I feel that if they are used for principal selection, appraisal data should be prepared by the Bureau of Education and then provided to selection panel members. No original data should be offered and I think it would be appropriate to do in this way. (S4C.Q6.7F)

7.3 Analysis of outcome treatment

Seven questions encompassing five elements were devised concerning the outcome treatment stage, comprising setting annual improvement objectives (Q47), professional development (Q48~49), performance awards (Q50~51), principal selection (Q52) and expenditure on improvement (Q53). Currently principals' appraisal reports are usually neglected and mistreated in any evaluation process. Interviewees believed it very important to treat appraisal

reports with caution. In particular Bureaus of Education should carry out overall analysis and arrangement of the reports and ensure their proper usage:

These reports should create positive effects for which the Bureau of Education should carry out analysis, arrangement and processing of performance reports for each year [...] Otherwise, such data would still be placed in storage rooms tomorrow, as they are today [...] and these reports would be useless. (A6M.Q7.1A)

After a report is worked out, advisers should formally forward it to the charging unit of the Bureau of Education which needs to review such data [...] putting forward requirements and processing the report immediately. Besides, if there is any need for advisers to provide further suggestions for principals toward setting performance objectives on their next cycle, they should be delivered through administrative channels to ensure compliance. (A1K.Q7.1A)

7.3.1 Setting annual improvement objectives

Respondents tended to agree that the shortcomings of principals' performances should become priority improvement objectives for the next academic year (Q47, $m=3.45$), with no statistically significant differences between respondents in different posts (Appendix E). Interviewees indicated that after performance appraisal advisers should actively help principals to review objectives unattained or deficiencies to be corrected and list these as preferential improvement objectives for the next year, emphasising PPM formative functions in helping principals to sustain improvement and enhance school quality:

The advisers should let the principal know the results of appraisal and advise her/him as how to reflect, how to adjust and how to re-achieve progress [...] the most important things would be to ensure the growth of the school and the progress of the principal. Don't publicise results as objects of comparison with

others [...] and don't have anything formalised (S2K.Q7.1B)

For deficiencies to become remedies the first principle I just mentioned is no punishment and the second principle is to incorporate these into the next cycle as preferential improvement objectives for the next year (P1K.Q7.1B)

Even more; everything needs to be planned, for example, clearly listing how long it takes to achieve what kind of improvement objectives so that principals can follow plans that work. (P5C.Q7.1B)

7.3.2 Principal profession development

There were two questions with respect to mechanisms of principal professional development: the establishment of a national principal college/centre (Q48); and the creation of a special network or website for principals (Q49), which respondents rated at $m=3.32$ and $m=3.46$ respectively. The reactions of both JHSPs and PriSPs were again significantly higher than that of EdAs as to the former (see Appendix E), possibly given the considerable issues of personnel and expense with which a new institution of professional development would face the Bureau of Education. Some interviewees felt that if professional development was deemed necessary in appraisal reports advisers should direct principals to work out plans for active participation in professional development activities during their summer vacations:

If it is discovered in annual performance reports that objectives have not been achieved such a case may be related to the professional capabilities of principals. So principals should accept training during their summer vacations. In Taiwan, where it is popularly believed that summer vacation is a period of relaxation for both principals and teachers. But if so, why should we offer them a salary? I would highly agree with practices in America, where no salary is offered during the summer vacations as there is no work. But you still need to take up advanced studies during the summer vacations. If you don't, you will

lose your agreement of employment. You can gain your job through your capabilities and your capabilities will be derived from your professional development and your professional development will be achieved by your advanced studies during the vacations. (A6M.Q7.2A)

Therefore advisers should also put forward advice on the professional development of principals in their appraisal reports (P2K.Q7.2A)

If it is the principal who lacks professional capabilities [...] advisers can require the working out of a plan of development, thereby bringing appropriate pressure to bear so that the principal can be urged to pursue advanced development periodically. (S1K.Q7.2A)

As to mechanisms of professional development, some interviewees distinguished short and long-term planning, the former based on actual demands of principals for workshops to share experiences or short-term studies sponsored by Bureaus of Education. Long-term planning included establishing counselling groups of principals systematically organized by various local governments, or entrusting universities to set up principal centres responsible for planning advanced classes. There could be difficulties with current policies in establishing a special agency. But establishing a principal centre in the National Academy for Educational Research to specialise in planning a professional development centre and in building up and managing special websites for principals seemed desirable:

Specific advice should be available as to the professional capabilities of principals. For instance: when can I make some improvement this year? And then gradually promote my own professional capabilities year by year. Methods could include self-directed learning, studies and selective courses for credits (S4C.Q7.2B)

Each year, the Bureaus of Education themselves provide a lot of studying or advanced study opportunities, where these principals who were recognized as needing to be trained should be all placed on compulsory courses (P2K.Q7.2B)

It can be effective only when the principal is able to understand what his own needs are and the instructors can be hired in view of his needs. (A4C.Q7.2B)

Considering the current financial state of our government, it is not easy to establish an agency of this kind (principal institute). So we may as well allow some universities [...] to set up principal-focused curricula [...] it would be quite practicable [...] if principals generally lack this capability and need to be improved [...] the Bureaus of Education would entrust relevant units to provide the parts of curricula [...] while where is there are individual local needs [...] various short-term lectures can be organise to increase their skills [...] It would be fine to build up special websites for principals where information can be provided and principals can support and encourage each other. (A1K.Q7.2B)

Via such websites, the sharing of experiences can be achieved between principal groups. (A6M.Q7.2B)

However, there should be a special unit and personnel who can continuously manage such websites, updating, maintaining and designing the web pages. (P2K.Q7.2B)

Here, the Sanxia Teachers In-Service Education Centre (the Preparatory Office of the National Academy for Educational Research) can be invited to carry out advanced analysis and learning of what principals generally need, and set up some curricula [...] which could be publicised in advance and made known to various counties and cities so that principals can come and sign up. Bureaus of Education can also actively invite principals to attend such programs. Or advisers should specify in their reports what principals need to study in the summer vacation. If there are very many participants the programme can take place in various districts. (A6M.Q7.2B)

However, while some principals might take initiatives to pursue advanced studies and development others would be quite passive in this respect. Thus, some interviewees also believed that it might be necessary to specify a certain number of hours that principals were required to pursue in-service education in each academic year, just as is the case teachers:

The current problem is, whether requiring principals to go for advanced studies

can be enforced [...] as a principal willing to seek growth would certainly find a lot of opportunities to pursue advanced studies [...] but for those who don't want to seek growth [...] specifications would be requisite, just as the Ministry of Education has now specified that every teacher should complete at least 18 hours of studies for a year. Similarly, it is possible to specify how many hours a principal [...] should go for studies in a term. (S1K.Q7.2B)

7.3.3 Principal performance rewards

Two questions were related to the issue of principal performance reward, the first considering whether it should be established (Q50) and the second concerning ways of doing so (Q51). Respondents favoured the establishment of performance reward systems to encourage better performance by principals (Q50, $m=3.38$) JHSPs and PriSP significantly more strongly than EdAs (Appendix E). As to the ways that performance rewards might be adopted, four of five items listed achieved a mean score of over 3 points, the exception being 'adopt a performance related pay system' ($m=2.92$). Among the other items 'establish principal performance bonus systems' (Q51.4, $m=3.41$), 'increase principal annual rating bonuses' (Q51.5, $m=3.23$) and 'increase academic research allowance ranking' (Q51.3, $m=3.15$) enjoyed more support than 'increase the highest basic salary scale of principals' (Q51.2, $m=3.01$). 'Increase the highest basic salary scale of principals' and 'increase academic research allowance ranking' were both significantly more strongly favoured both by JHSPs and PriSPs than EdAs (Appendix F), revealing their general eagerness to establish principal performance reward systems in relation to PPM. The most practicable way was regarded a new principal performance bonus system. Principals' opinions diverged from those of administrators as to the appropriateness of using academic research allowances and the highest basic salary spines for such rewards. Moreover, respondents did not generally agree adoption of a performance related pay

system or different grading levels though.

Interviewees also suggested that proper rewards should be offered to those with excellent performance, with emphasis on individual honours, such as the title of 'super excellent Principal' and their selection as advisers. While material rewards can be offered to individuals, even more should be provided to the groups of hard-working school staff from which excellent principal performance would be actually derived. If group rewards could be offered, teachers would feel that they were working for themselves, not for principals. In addition, if material rewards were not offered to individuals but made in the form of additional school funding, schools would be encouraged to do more for their students. As to setting limits to rewards, interviewees regarded them as unnecessary; principals could be encouraged to challenge themselves, share their experiences with others and avoid malignant competition:

It's necessary to set up reward systems because reward is tantamount to acknowledging processes of hard work! But the objects of reward should be mainly groups, not individuals, because [...] the excellent principal is forged on the basis of a group of hard-working teachers [...] as for principals, I feel that rewards via open...processes of commendation...such as a medal [...] would be more valuable than money because it is possible to run out of the money but [...] the reward like the Oscar Awards, [...] the status would be more valuable than cash. (P8N.Q7.3A)

If the principal is indeed highly excellent we can provide him with opportunities to visit abroad or preferential chance of being hired as an adviser. This is a kind of honour. The secondary reward [...] there should be some material rewards yet such rewards are offered not to encourage principals but schools. [...] (Since) good principal performance [...] would be acquired from the dedication of all school members

So whatever needs the school may have this year [...] whatever special resources should be offered to him [...] the offer of more resources will allow

him to do a better job and eventually benefit the school and the students.
(A6M.Q7.3A)

For this reward system it is best to set no limitation or quota and rewards should be offered whenever principals have achieved their objectives to certain standards. It is very hard to compare principals' performance objectively with others while they set different objectives individually. And without such comparison principals might be more willing to share their experiences.
(S4C.Q7.3A)

Some interviewees also indicated that it was feasible to use the results of annual performance appraisal as reference for their annual performance rating. It would focus on their own challenge rather than comparison of them with others:

It would be very good if the achievements or improvement of principals for an academic year were to be provided to the Performance Rating Commission for Principals as an important basis for making decision of principals' annual performance. (P5C.Q7.3A)

While some thought that it might be good to adjust academic research allowances and the highest basic salary scales in accordance with performance, the possibilities, in practice, of doing so were very low, the adjustments involved implicating a complex of changes that would inevitably include other teachers and deans:

From my own perspective, it is certainly best that the salaries of principals can be adjusted but the problem is whether the financial conditions of our government can allow it [...] and whether it would also be necessary to adjust salary standards for teachers? It may involve in problems of equity [...] so I think it is hardly possible to change salary or adjust salary scales. (P7N.Q7.3A)

Performance related pay systems or classified salary scales for principals were also regarded as inappropriate because classification would mean

comparison among them which sometimes created problems of equity. If at the technical level, it is regarded objectively as impossible to differentiate good principals from poor ones, the outcomes of performance appraisal would be in doubt and the functions of counselling compromised. Moreover, interviewees considered it impracticable to base salary scales on the size of schools because running a small school well in a remote area was sometimes much harder than doing so in a well-located, big school. Some excellent principals might be reluctant to serve at small schools when it came to principal selection:

Technological problems may be first taken into account when setting classified salary scales of principals [...]. And the technology is just whether there is a convincing benchmark for differentiating excellent principals from poor ones. So in the current circumstance it is much easier to offer rewards in the form of performance bonuses than to adjust pay scales, while doing so is quite unlikely to create other troubles (A1K.Q7.3B)

If principal performance is used as a basis to construct classified salary scales for principals or adjust pay structure, counselling processes would become very sensitive. Because as [...] it would be involved in an advance or retreat of personal career [...] the deficiencies of principals could be intentionally concealed! (P4C.Q7.3B)

I think, it is unreasonable to set salary scales of principals on the basis of school size [...] if it could be said that the bigger the school the heavier the burden would be but then what about principals of schools in remote areas? If at the time of selection the principal is considered for transfer from a big school to a smaller one does this mean that his salary will have to be reduced? So I think it's quite unfeasible. (P5C.Q7.3B)

7.3.4 Principal selection

Respondents on balance agreed that the main criteria of selecting or rewarding principals should be based on the extent to which they achieved annual performance objectives (Q52, $m=3.38$), with no statistically significant difference between respondents in different posts (Appendix E). Some interviewees regarded this as not only reasonable but also capable of creating stimulating work motivation. In Taiwan principal selection is mainly focused on overall school performance which might not actually reflect the contribution of principals, given their varied contextual differences. For such reasons, the overall performance of schools should not be taken as the criterion for judging the performance of principals; instead emphasis should be laid on principals' achievement of performance and improvement objectives set each year. However, while objectives of each school were different it was not easy to compare principals' performances between them. At principal selection, performance efforts which have reached certain requirements should be privileged, while the main task of Principal Selection Committees should be to make the best decision of who should be selected to which school, in view both of the features of schools and the capabilities and leadership styles of principals. Those who might fail to measure up to certain criteria during their four year terms would be naturally knocked out by such a selection mechanism:

If we can focus on how principals have worked over a period of four years and look at the objectives they have set themselves and those they have failed to realise in their terms [...] we would then be able to appraise very objectively [...] the actual results or performances that the principals have strived to achieve in these years. And this only should be the paramount standard for principal selection. (A4C.Q3)

I feel that ultimately results can be taken as the reference for principal selection because this management system [...] is already very rigorous (P4C.Q7.1A)

If it can be applied to principal selection in future and principals with excellent performances were objectively chosen for schools as they wished then I think this would be also a kind of encouragement. [...] because currently principal selection is always troubling us while its impact is great as well. (P5C.Q7.3A)

The benefit of this management system is that it might be able to more objectively judge the efforts and contributions of principals than those at the present but its deficiency lies in the limit of comparison with others when performance is based on different objectives [...] In fact, principal selection is not about selecting the most capable principal but the most suitable, competent principal for the school [...] Thus, as long as the performance of principals is above a certain level they should be selected. The main duty of selection members is to make the final decision as to which principal is suitable for which school. (A1K.Q7.4)

In addition some interviewees believed that punishment should not be a purpose of PPM. It might be inappropriate to impose any punishment on principals with unsuccessful annual performance and of more use that a system provided them with opportunities to make improvement with active assistance. If the overall performance of principals still remained imperfect by the end of their four-year term it would be reasonable to deal with incompetence through the selection mechanism:

I think, no punishment should be immediately imposed on those with poor annual performances, as this system is mainly intended to facilitate the growth of principals. Therefore, advisers should assist principals to discover and solve problems. Certainly, those with good performances should be commended but I think more active assistance should still be provided to those with poor performances. If the performance of principals has remained imperfect throughout four years, then I think it would be reasonable to eliminate them by the way of the principal selection mechanism. (P1K.Q7.1A)

7.3.5 Providing for performance improvement

Respondents in the main thought that local education authorities should have an annual budget for the use of annual principal performance improvement (Q53, $m=3.42$), JHSPs and PriSPs doing so significantly more strongly than EdAs, and JHSPs more significantly than PriSPs (Appendix F). Many interviewees felt very strongly that the expense of and resource for objectives prioritised for development and improvement for the coming year should be listed in performance appraisal reports so that schools and Bureaus of Education could incorporate them in planning budgets. This would free them from political interference and render them more compliant with the needs of schools:

I think...after the confirmation of advisers, the Bureaus of Education should certainly sort out affairs related to performance development or improvement [...] and then based on these demands...provide subsidies or expenses. This would be most objective because it can avoid more subsidies being provided to certain schools [...] since some councillors [...] have strived for them [...] If there is such a system [...] resources can be really used to improve the parts of the school that indeed need to be improved preferentially so that the money can be spent exactly for appropriate uses (P6C.Q7.5)

If [...] information is required by educational authorities, it can be presented in appraisal reports and authorities, in becoming aware of it, can provide the resources which principals need (S4C.Q7.1A)

If [...] the cost is not large it should be planned in the budget of each school [...] in the event that the school has no way to raise the funding, it should work out a plan and submit it to the Bureau of Education to incorporate it into its annual budget in order to provide the grants needed. (A1K. Q7.1A)

However, because the national buget year runs from January to December while the school year runs August to July, February to July semester , school

expenditures are incorporated into current budgets on the basis of actual requirements, while those for the August to January semester need to be subvented from that of the previous school year:

It will be very important that if the resources necessary for the principal to achieve improvement or development objectives of the next academic year (August to July) are to be ready [...] Bureaus of Education should estimate the possible expenditures principals require for the first semester and plan in advance for their special inclusion in the previous year's allocations. Then when performance reports [...] have been verified by Bureaus of Education a special grant can be distributed according to actual demands. I think this method should be workable. (P5C.Q7.5)

Educational administrators indicated that while the annual resources of Bureaus of Education were limited, there was concern their ability to satisfy schools' demands for facilities and buildings. Therefore, limits should be set on the allocation of each school which excluded improving in buildings and facilities which should be otherwise dealt with. Whether principals made full use of their allocations should be also taken into account as an element of their annual performance:

I'll be worried whether the allocation is sufficient for the year because the renovation of some old school facilities, construction of new schools, and building of new classrooms have created a heavy cost for us [...] I think it will be quite difficult to pay for any additional large expense [...] While there will be an overall plan for school construction [...] would be better to withdraw improvement items for facilities and school constructions from annual performance objectives? (A3K.Q7.5)

I think it is an erroneous concept when some principals say that they cannot run their schools well as they lack money [...] There is no absolute correlation between the performance of principals and their expenditures. Instead what should be considering is whether you can achieve the greatest benefits from the funds that government distribute to them and list the results as an item of performance review. A principal who lacks money but can run the school well

would be absolutely more effective than a principal who has money but fails to operate his school satisfactorily! (P4C.Q7.5)

7.4 Summary

While school principals are condemned to play relatively isolated roles, they can well reduce such a predicament by seeking actively to access various groups, striving for personal growth and pursuing such assistance as is needed from others. In Taiwan, every principal has to face the pressure of job selection every four years and still lacks professional support in this process. It is such circumstances that impel the necessity to lay emphasis on the development of PPM systems. The questionnaire survey and interview data presented in this chapter can be said to be generally supportive of the main features of such systems.

By and large, an integrated 'development and 'improvement-orientated accountability model' was accepted, in which they concur with the notion that a main purpose of PPM policy should be to assist professional development and performance improvement while calibrating the extent of 'improvement' as reference for annual performance rating and principal selection as a secondary aim. It was also hoped that a professional advisory support system for principals would be planned, to transcend and replace the current inspection system of local authorities. As to individualisation and contextualisation of PPM, performance objective settings and outcome treatment should receive more attention, on a basis of mutual trust, common consensus and sustainable improvement. Partnership not only should be established between principals and advisers but also with school colleagues.

In addition, while performance counselling and feedback was emphasised during PPM processes, the establishment of appropriate honour rewards and team bonus reward systems should also be considered.

Although most educational administrators and principals held similar views on the great majority of issues, there were some significant differences of response, roughly reflecting their super- and subordinate positions in the local authority hierarchy. Principals concerns tended to focus on the educational problems they faced currently and the forces to which their interests they would be subjected to a PPM system. They paid more attention than educational administrators to the hope of providing qualified professional external advisers to support them, in place of the current inspection system, highlighting confidentiality and due process, emphasising the establishment of principal professional development mechanism and reward systems and providing improvement grants and resources. In turn, educational administrators were concerned their more overtly bureaucratic, line-management duties, focussing more upon accountability-orientated purposes, the roles of inspectors, the importance of local education policy and quantitative outcomes of a PPM system.

Chapter Eight

Conclusions and Recommendations

8.1 Introduction

Devotion to principles and practices of new public management has rapidly increased in virtually all developed, as well as many developing societies, not least in the belief by their governments that they are part of rendering their economic systems fit for the purpose of meeting global competition (see Section 3.3.2.3). In education, one of its more obvious manifestations has been the development of an 'accountability movement' and three policy technologies: market, managerialism and performativity (Ball, 2006: 143) on a virtually worldwide scale, within which issues of school performance management have grown to great importance in many countries (see Sections 4.2 and 4.3). Concepts of educational accountability and what have become referred to as 'the 4Es', effectiveness, efficiency, excellence and equity, in education have become central to their policy frameworks, resting on value or ideological positions whereby schools and principals are expected to pursue high quality performances. Just as businesses are pictured as being led by entrepreneurial and management spirits, so the 'business' of schooling is seen to require a departure from relatively paternalistic administrative modes toward more performative ones (Ball, 2004), where the importance of heads and principals as schools' 'managing directors' is taken for granted. This has obvious advantages for central governments who both see traditional 'producer interest' in public services as a source of inefficiency and waste and who believe that more active shaping of local services, like education, require relatively strong central influence through legislative and

target setting regimes.

In Taiwan, after the massive political and social changes that have taken place over the two decades since 1987, educational reforms in curricular and teaching modalities, educational decentralisation and participative management with teacher and parent involvement since 1995 have reshaped a new and characteristically Taiwanese context of school management (see Section 4.4.1). Here, too, global focus on raising education quality has been a salient concern and accountability for it placed on the shoulders of principals. While their position has long been venerated, principals are now seen in Taiwan as crucial school leaders, their leadership and management believed to be deep influences on school effectiveness and teaching quality (see Section 1.1.1). They are expected not only to provide professional leadership and management but also to raise the quality of education for students. Whatever empirical backing there may be for such expectations, and they may be based as much on hope than achievement, there is scant evidence of the existence of adequate systems of human resource development and facilitating mechanisms for principals during their professional careers (see Sections 1.1.3, 1.1.4). In face of a fast changing environment of education reform and the increasing expectations of a multiplicity of reference groups, from employers to parents and students themselves, principals have gradually given way to mounting and complexifying work pressures (S. X. Chen, 2003; Jiang, 2001; R. Y. Lin, 2005). If these expectations are in any meaningful sense to be met and requited across the board, in terms of whatever is expected as, or passes for, more effective performances, external professional support of appropriate kinds, it is argued, must be provided to assist principals to manage their schools (S. X. Chen, 2003; Liu, 2002; McMhon, 2003). Meanwhile, in Taiwan, the current, statutory appraisal

system conducted for purposes of principal selection has not only brought unprecedented pressure upon them but largely nullified widespread possibility of professional support and opportunity to make continuous improvement (see Section 1.1.5). It is such concerns that seem to make it necessary to design a PPM system that can integrate principal performance and professional development suited to the needs of Taiwan.

PPM is, indeed, an emerging idea in school management in some parts of Taiwan. In this study my aim has been to interrogate the relevant literature as preface to conducting empirical research among stakeholders that would facilitate construction of an acceptable and worthwhile PPM system for our schools that would be of utility both to educational policy makers and academic researchers. Thus, the remainder of this chapter will address what may be said by way of overview and reflection in answer the six research questions (see Section 1.3) over three sections: conclusions (what the study found), recommendations, and limitations of the study.

8.2 Conclusions (What the Study Found)

Conclusions can be divided into two parts, the first drawing on the literature review, the second reporting and reflecting on empirical findings.

8.2.1 Literature review

8.2.1.1 Basic conceptual analysis

Conceptual analysis is an exercise in probing terms and ideas so as to clarify

usage and meaning. Though somewhat discredited as a philosophical stance its life continues in essentially value-oriented discourses, like those of management and education. Standing at their crossroads, Principal Performance Management (PPM) is regarded as different from Principal Performance Appraisal (PPA), consisting of a cyclical improvement process toward specific objectives agreed between advisers and principals in a spirit of cooperation and open communication over a period of time in order to assist the latter to improve their professional capabilities and performance. Emphases in a PPM system are on consensus, collaboration and processes of sharing, enabling principals to integrate their personal goals with school development objectives and performances with professional development. Protagonists see it as capable of guiding professionally developed principals with strengthened work motivation toward promoting the effectiveness of their schools through school development and improvement plans. PPM systems claim to integrate HRM functions of acquirement, maintenance, appraisal, development, transfer and remuneration, including principal selection, support, professional development, transfer planning and performance rewards (see Sections 2.5.2.2). Whether any of these things are true in the contingent world of practice is an empirical matter. But clearly they are culled from theoretic, disciplinary sources that may help explain their character.

8.2.1.2 Theoretical analysis

Different philosophical paradigms hold to different, sometimes apparently conflicting, ontological, epistemological and methodological assumptions which, in turn, incline to different views about the construction of possible PPM systems. Choice between such orientations is a necessary feature of theoretical and empirical work; research is nothing more than confronting

facts with ideas, theory with appropriate empirical description, and vice versa, in open relation. While we should regard one as nothing without the other, the knowledge and procedures which generate research are manifold. Thus we noted that, for example, positivists would tend to regard PPM systems as having the character of objective and independent reality where managers might rely on rational analyses, naturalists incline to lay emphasis on understanding contextualisation, changeability and inter-subjectivity, critical theorists to seek to reflect upon and demystify the nature and operation of authority and ideological dominance and poststructuralists to regard them as panoptic devices for monitoring and controlling principal performance. Each has different consequences for how we might conceive of, plan and operate PPM (see Section 3.2.5)

Whenever there are organisations there is power and control that constitute and are expressed through management but its modalities are not given. Individuals may be either respected or objects of control; consensus may be sought or views imposed, goals are multiplex. The contention here is that, while being realistic about the 'ownership' of organisational resources and goals, awareness of the derivation of different philosophical paradigms from basic assumptions of subject/object, absolute/relative and realistic/historic dual opposites might well usefully incline us toward concepts of 'cooperative partnership' in seeking to integrate subject and object relationships between managers/advisers and principals in PPM through processes of achieving 'common consensus objectives' that compromise between absolute and relative objectives, relying on a notion of 'sustainable improvement' to link up or integrate person management, development and accountability purposes. Such an orientation would seem particularly proper in a non-market, public service domain where empowered professionals are given a degree of

autonomy to work in historically highly conditioned and varied contexts to seek improvement in others through pedagogic means. Moreover, in the language of the moment, there may be 'good science' that points to the good sense of such improvement-oriented accountability

The worlds of administrative and management theory and practice have always tended to draw on psychology rather than other social science sources for such inspiration. Three psychological schools of thought were examined as possible sources of inspiration in the planning and implementation of PPM systems, encompassing behaviourist, cognitive and humanistic theories with their relative emphases on shaping, understanding and self-actualisation. Human relations (HR) thinking, long the underpinning of people-management activity, splits in its emphases on the relation of incentives to intrinsic and extrinsic motives and demands for individual performances, Maslow, Alderfer and Herzberg, for example, offering variant content views of motivation where both internal and external factors matter and Vroom, Adams, Locke and Weiner developing process theories of motivation linking both internal cognition processes and individual behaviours and the causal relationship between actions and outcomes (Section 3.2.4.2). Three historically successive, though continually influential administrative/organisational theoretical approaches, were then explored, classical scientific, human relations/behavioural science and system theories, with their respective, relative emphases on one-best-way work behaviours, employee motivation and satisfaction and organisations as open systems composed of interdependent sub-systems. It was contended that the most recent trends in management theory, total quality, human resource and new public management, can be said to have increased claims as to the importance of PPM systems, each placing great emphasis on the intensification of individual

capabilities and organisational performance. While TQM seems to represent a triumph of customer sovereignty and human relations the importance of human resources in increasingly knowledge-based production systems, the overt introduction of concepts of private sector management and market competition intended to improve and intensify the effectiveness of governance, through new public management techniques, could be said to celebrate a marriage of adoption of quality improvement, contracting-out and performance related pay systems. The intellectual cross-currents of models of human nature and behaviour and public administration motifs (such as producer-capture and principal-agent theory), heavily influenced by economistic notions of public choice, are as complex as they are evident.

8.2.1.3 Experience of Britain, New Zealand and Taiwan

Set against such theoretical foraging, the third purpose of the study has been to examine the experience of PPM in Britain and New Zealand and review the current situation in Taiwan. Granted the different historical and cultural backgrounds of their education systems, it was hoped that the experiences of planning and implementation documented in Britain and New Zealand could be applied, with due circumspection, to better understanding of problems confronting Taiwan. In an era of global competition between knowledge economies, intensification of manpower quality and promotion of education quality have both been regarded by governments and international agencies as core strategies in enhancing international competitiveness. Improving school performance by adoption and implementation of PPM policies, whether of regional or local bases, as in the USA, or on a national scale, as in both Britain and New Zealand, has become 'normalised', what passes for 'good science' being pressed into commonsensical, necessity. As the

likelihood appears to be that if Taiwan at some stage adopts something like full-blown PPM it will be on a nationwide scale, it was thought sensible to use them cautiously as comparators.

The PPM policy adopted in Britain has taken continuous promotion of head teachers' capabilities and improvement of pupils' attainment as its core elements. From 1991 development-orientated head teacher appraisals were conducted though, as they failed to enhance pupils' attainment, a new PPM policy was adopted in 2000, accentuating raising pupils' achievement and principals' professional capabilities. Although such policies' emphasis on national pupil test results may not necessarily suit Taiwanese circumstances and although there may be some deficiencies concerning the competencies of governing bodies as appraisers and time allotted to counselling process for heads, the system conducted in Britain has displayed several features that are worthy of high regard in a worked-out, development-orientated model. These include adopting an annual, cyclical, integrated management model, focusing on heads' professional capabilities and continuous performance improvement, arranging a trained pool of contracted-out external advisers, combining principals' performance objectives with school development or improvement plans, respect for principles of confidentiality and due process and establishing ancillary measures, such as Professional Standards for Principals, a National College for School Leaders, and Leadership Programme for Serving Headteachers. New, revised regulations on performance management for head teachers were launched in October 2006, to come into force on 1st September 2007 (DfES, 2006d).

Since 1989 New Zealand has put into practice its new education decentralisation system, adopting school-based management systems with

parents at their centre. At the same time, a complete accountability mechanism stretching from central government to schools has been constructed, the Ministry of Education responsible for policies and standards, while an independent Education Review Office is responsible for education inspection and appraisal, school boards undertaking and supervising local policy-making which binds principals (see Section 4.3.1). Its PPM systems particularly rest on rights and duties connecting decision-makers and executors by way of school charters and principal performance agreements based on an annual cyclical management model combining professional development and performance, integrating principals' performance with school objectives, privileging consistency of policies and establishing professional standards for principals.

It was contended that both routine annual performance rating and principal performance appraisal conducted every four years in Taiwan, which have always tended to the summative, need review and repositioning. Overall operating systems have neither been planned completely nor are fit for purpose, lacking specification of annual performance objectives, neglecting professional development, relying on untrained appraisers and standardised indicators, excessively quantified among methods overly relying on time-compressed review of files. Principals can only sense pressure of educational policies, not opportunity for improvement.

8.2.1.4 A preliminary PPM model and its elements

The fourth purpose of the study has been to construct a preliminary PPM model and its elements which should be considered from the literature review which, in effect, both can serve as a checklist for the empirical issues to be

raised and might act as some sort of template against which Taiwanese present and possible future practices might be gauged (see Section 5.3)

8.2.2 Empirical research

The fifth purpose of the study is to examine the views of educational administrators and principals of primary and junior high schools, key professional stakeholders, concerning the possible shape of a PPM system in Taiwan. The information gathered by means of questionnaire survey and in-depth interviews suggested considerable support for an integrated, developmentally-oriented modality which provided principals with continuous professional support for improving the effectiveness of their management appropriate to the power and authority relations within Taiwanese schooling (Dimmock, 2000), where the traditional role isolation of principals was seen as needing to give way to more active learning from various other groups in their professional community, in the fast changing circumstances of recent educational reform.

In terms of formulation and design of a PPM system, participants concurred, with relatively few differences between position types, that what would be most desirable was one which was not only development-orientation or improvement-oriented accountability based on mutual trust, but characterised by annual, diagnostic school self-evaluation, assisted by trained external advisers with appropriate experience, personality characteristics, communication skills, problem diagnosis and wider professional capabilities, locally selected, centrally validated, then employed by local authorities or schools for up to three years, according to demand and respecting principals' views (see Section 3.1.3).

Nationwide professional standards for principals could be established, if not over standardised or theoretically fixated; leadership of principals may both a science and an art and there was strong belief that contexts varied, all schools were different. Key performance areas for principals, while covering administrative management, professional development and leadership behaviours, pupil attainment, parental satisfaction, public relations and financial management outcomes would necessarily differ in emphases from those of either Britain or New Zealand (see Section 4.3. 4.4), reflecting different expectations and system characteristics. To be suited to such puposes, methods and tools of data collection must be both agreed and apt.

As to implementation of PPM operating processes, while respondents negated the idea of performance agreement, which might only signify symbolic control as 'contract replaced covenant' (Ball, 2004: 152; Bernstein, 1996: 169), there was considerable consensus as to new principals converting diagnostic school self-evaluation, with colleagues, into school development plans as a working commitment within their four year term. These could be submitted to Bureaus of Educations before end of their first year, reappointed principals using relevant school evaluation data as the basis for annual performance objectives, all mainly based on school development and improvement plans and taking into account critical local influences. Annual performance objectives should include at least one item associated with pupil attainment, principals' professional development and school improvement, respectively, each year.

There was also wide agreement as to the trust, reliance on portfolios and regularity that should characterise communication and counselling processes

and the need to receive and attend to clear feedback, not only from advisers but, most importantly, school staff, as well as students, parents, superiors and communities. Given the embryonic state of PPM in Taiwan, views as to who should conduct performance appraisal hinged around its main, proposed purposes; if associated with either annual performance ratings or principal selection, Bureau of Education inspectors could properly partake, if developmental it should be mainly conducted by advisers, based on appropriate data, including adequate observation and lead to review meeting and confidential report, access to which was carefully delimited and upon which there would be right of appeal, comment or demurral.

There was strong support for establishing a 'complete' principal professional development mechanism based on performance outcomes, so long as it lay more emphasis on development and encouragement than discipline or control, centrally planned and led, while also favouring commissioning universities to set up special, advanced principal classes and a website built specifically for principals. There was also strong support for honorary, best or excellent, individual performance rewards for and preferential selection as advisers of outstanding principals and of performance as a basis for salary increase or appraisal bonuses, with most respondents seeing extra material rewards as best provided as group performance bonuses to the whole school. Performance related pay was undesirable while other forms of reward through increasing academic research allowances and the highest basic salary spine were also regarded as relatively unfeasible and scales based on school size impractical and inequitable. Though achievement of performance or improvement objectives might properly be used as the main measure in principal (re)selection, it was felt strongly that these should be modulated by school contextual factors; performances did not necessarily match principals'

actual contributions to their schools.

There were some differences, though they are not as extensive as might be anticipated to the occidental mind, in response strength to questionnaire items between administrators, primary school and junior high principals, the foci of their 'realisms', reflecting differences in standpoint in relation to hierarchic positions, in which educational administrators gave more weight to accountability-orientated purposes of PPM and the roles of administrative inspectors, while principals were more concerned with substantive issues of professional support and assistance. There may be something in the argument that principals and administrators come from much more the same tradition and share the same cast of mind in Taiwan, as compared, say, with those in England or New Zealand.

8.3 Recommendations

Given my background and work commitments it was inevitable that this study should seek to have an applied nature. While I hope that its findings add to existing academic understanding and will serve as reference points for others' academic studies in the area, it is also important to me that they may provide some reference for policy makers and their educational administrative agents seeking to promote the professional capabilities and performances of principals. I would contend that the conclusions arrived at form an appropriate basis for several, tentative recommendations to policy makers and future researchers:

8.3.1 Recommendation for policy makers

Policy makers would do well to give pause to the notion that ‘principals matter’. Administrators, teachers, parents and principals themselves seem to think so quite strongly and in many societies central governments intent on restructuring their systems have shifted from old-fashioned, rather paternalistic notions of their importance to school improvement and effectiveness driven rationales which centre on them as change-agents. This is a long way from saying that nice principals help to make happy schools or that incompetent ones engender dysfunctionality, it is to put them at the heart of our increasingly performative educational culture. But although policy makers now often act as if principals ‘matter’ in the sense of ‘making a difference’ to pupil performance the empirical evidence that they do so is somewhat limited. In education, as elsewhere though perhaps more so, things tend to be true because they are there, belief in them and accompanying behaviour regarded as ‘normal’. What policy makers ought to be asking themselves, therefore, is exactly in what ways do principals really matter? In doing so they also need to ask themselves how our schools really work. Our empirical evidence, though not unequivocal, indicated that principals may be isolated, even embattled, figures whose relationships other than with closest colleagues are rather distant. Necessity to reappoint or transfer them every four years through appraisal mechanisms is only just beginning to move on in some authorities from stereotyped rating scales based on information on file that militates against professional openness. Yet they now perform in a world of centrally driven educational reform where traditionalism is giving way to progressivism, pedagogical forms become more learner-centred, with concomitant changes in the nature of teacher-student, teacher-parent, teacher-teacher and, most relevantly to us, teacher-principal relations. We

ask our schools to be simultaneously more accountable, equitable and effective, though sometimes providing little more than new rules and exhortation to do so.

Policy makers must, therefore, be convinced that principals need performance management where they have not had it before because they and their schools have new tasks to perform that require certain sorts of professional leadership and management to be engendered through appropriate policies and measures for human resource recruitment, maintenance, development and management of principals themselves. We have already changed schools in a number of significant ways without paying much attention to how those who lead them change concomitantly. This would require as much concerted attention to their professional certification, induction guidance, in-service training and pay structure adjustment as to their performance management. Indeed, PPM without these precursors would be rather like making bricks without straw. The lofty achievements of education in Taiwan fostered high quality manpower which provided much of the impetus to the economic development that constituted its first, industrialising, economic revolution in the late twentieth century. It was achieved with little attention to principal manpower. However, in an environment of growingly intensive competition worldwide, whether such superiority can be maintained raises big questions for education structures in general and the character of their labour power in particular. Continuous educational reform must rely on the whole-hearted dedication of front-line principals and teachers supported by renewed and updated human resource development and management policies. Reshaping Taiwanese principalship is not simply some new managerialist necessity but a matter of shifting it from predominantly administrator to educator mode, required if the style of reform

already in train is to be delivered. And there should be no illusion that such support should be for principals without matching provision for staff.

Policy makers can be assured that the majority Taiwanese primary and junior high principals and administrators are ready to embrace a PPM system wholeheartedly in most respects, if with some residual caution concerning others, if it pays attention to needs for professional support and counselling for those responsible for the delivery of educational reforms and is oriented to sustainable development and excellence of schools. It would entail specification of annual performance objectives for principals and provide supportive counselling processes to help achieve them, as well as providing diagnostic and review process that would help to seek possible solutions for problems of failure to achieve performances. Support for such change tended to be most marked in those local authorities whose systems had already moved some way in the direction of developmental appraisal. Given this, the time appears ripe for active pursuit of PPM policies, first prepared for by careful policy legitimisation. There should be review and construction of the establishment of professional standards for principals, principals performance reward system and professional development mechanisms. The earlier such measures can be planned, the more effective impetus of the policy is likely to be. Policy makers would do well to adopt a model of gradual development, seeking consensus between stakeholders through consultation and discussion and communication, not least to head off misunderstanding as to means and purposes. A development-orientated model, as in Britain, almost by definition, requires gentle introduction until principals have become conversant with its operation as a system and it has been reviewed and corrected. A developmental or advisory group of invited scholars and practitioners might be appointed to carry out a policy trials and pilots in selected

communities, avoiding live, mass system experimentation, such as too often has marked educational innovation.

8.3.2 Recommendations for further research

Although relevant data have been compiled through literature analysis and empirical study, a PPM model has not been tested on site in this study, even though, hopefully, what would count as one in the Taiwanese context, has been clarified. An experimental study would need be carried out in one or more selected communities to further test the feasibility of this model.

It has been proposed but not developed that different PPM models can be adopted depending on the various motivations, capabilities and career phases of principals. The fact is that all principals in some degree differ from each other in achievement motivation, professional capability and experience. Some have strong self-motivation, good capabilities and rich experience, such that they might not only naturally and easily undertake self-development but also be well able to provide counselling services to others – they may be their own, best PPM integrators. Others might find processes of both self and external scrutiny less congenial. It would be worthwhile conducting further study to identify the character and contexts of different motivations among principals of varying capabilities and experiences and what management models best suit them. Gender, age, length and shape of career pattern and service might all be interesting avenues for further exploration beginning, indeed, with the unexploited data in these areas which this study has already produced but not yet analysed. A number of interviewees believed that the PPM should be also conducted with teachers to integrate their performance objectives with those of their principals and, clearly, there should be further

planning with respect of operational models of future teacher performance management.

8.4 Limitations of the Study

It is inevitable that there may be some limitations to every study. The study mainly focuses on issues attending the possible formulation of an appropriate principal performance management system for primary and junior high schools in Taiwan. No reference has been made to senior high schools. This is because compulsory education in Taiwan is only up to junior high level and is managed by local government. Senior highs are in the direct purview of central government and enjoy more autonomous management powers. While investigating them would be of great interest, it would certainly require a separate and rather different approach.

The nature of a PPM system is inherently practical, its theoretical frameworks as yet undeveloped. It is for this reason that I have tried to examine and draw out possible ones from philosophical, psychological and administrative perspectives as reference points. However, this is easier said than done; the scope of these three fields is too extensive to permit exhaustive treatment and, given the fragmented, 'horizontal' character of discourse in the humanities and social sciences (Bernstein, 1999), we must recognise that different approach paradigms or schools of thought have perspectives that are as likely to conflict as to coexist with or add to others. Although I have ambitiously attempted to synthesise different thoughts in an 'integrated' model, its status is highly pragmatic and provisional. Moreover, due to time and data collection limitations, exploration of countries which have implemented PPM system is

confined to the UK and New Zealand and it will be important to examine practice in other countries in the future. While only few articles searched from journal databases are focused on PPM in both countries, the effects of its policy implementation can only be analysed by limited data. In addition, some available literatures related to performance management are derived from business and industrial management fields which may not be lightly applied to the context school management. While most of the focus in the performance management literature is laid on employees, rather than top managers in organisations, its directly application to the construction of PPM systems is limited.

It should also be acknowledged that participation in this study was confined to administrators and principals and excluded other important stakeholders, particularly teachers and parents. Those surveyed were selected from all 23 counties/cities of Taiwan by systematic sampling with a random start and purposive sampling, though interviewees were selected from three counties/cities only, representing differing types. Some administrators and principals interviewed were recommended by their line managers as being responsible for, or experienced in, principal evaluation or school evaluation. Insofar as the interview data gathered could be argued to largely reflect the main opinions of those responsible for formulating PPM practice and those who might already have been somewhat affected by partial versions of PPM, they might not fully represent the perspectives of all administrators and principals in Taiwan. And inevitably some information obtained by both questionnaire and interview with administrators and principals may reveal prejudice about or ignorance of PPM systems. But this is in the nature of social science research in this genre; respondents were not chosen because of any knowledge of or enthusiasm but simply as practitioners in post. My

methodological approach, while consciously seeking to combine quantitative (questionnaire) data with qualitative (interview) material equally deliberately did not attempt to use other methods, such as observation. I have set out to map relatively uncharted terrain and acknowledge that detailed exploration of principals' work and relationships, including those engendered by performance management arrangements will in future require more ethnographic forms of study.

Moreover, while the original questionnaire was in Chinese and all of interviewees participating in the study spoke Chinese (Mandarin) with some Taiwanese, I first had to transcribe interview audio-recordings in Chinese, and then translate them into English. Although during the process of translation, some formulations had been discussed with Taiwanese researchers to catch and retain 'real meanings', there may be still some language bias between the original thoughts of interviewees and excerpts, as well as questionnaire wordings, due to the limits my ability to translate and the gap in the ineffability of oriental and occidental minds.

English Bibliography

- Adams, S. J. (1963). Towards an understanding of inequity. *Journal of Abnormal and Social Psychology*, 67, 422-436.
- Advisory Conciliation and Arbitration Service, ACAS (1986). Report of the Appraisal and Training Working Group. In Department of Education and Science (DES), *School teacher appraisal: A national framework* (pp. 25-58). London: HMSO.
- Ainsworth, M. and Smith, H. M. (1993). *Making it happen: Managing performance at work*. Sydney: Prentice Hall.
- Alderfer, C. P. (1969). An empirical test of a new theory of human needs. *Organizational Behavior and Human Performance*, 4, 142-175.
- Alderfer, C. P. (1972). *Existence, relatedness, and growth*. New York: Free Press.
- Altschuld, J. W. and Lower, M. A. (1984). Improving mailed questionnaires: Analysis of a 96 percent return rate. *New Directions for Program Evaluation*, 21, 5-18.
- Anderson, G. L. (1990). Toward a critical constructivist approach to school administration: Invisibility, legitimation, and the study of non-events. *Educational Administration Quarterly*, 26 (1), 38-59.
- Anderson, G. L. and Grinberg, J. (1998). Educational administration as a disciplinary practice: Appropriating Foucault's view of power, discourse, and method. *Educational Administration Quarterly*, 34 (3), 329-353.
- Anderson, M. E. (1991). *How to train, recruit, select, induct, and evaluate leaders for America's schools*. Eugene, OR: University of Oregon.
- Andrews, R. L. and Soder, R. (1987). Principal leadership and student achievement. *Educational Leadership*, 44, 9-11.
- Apple, M. (1982). *Education and power*. London: Routledge & Kegan Paul.
- Armstrong, A. (1998). A comparative analysis: New public management- the way ahead? *Australia Journal of Public Administration*, 57 (2), 12-26.
- Armstrong, M. (2004). *Performance management: Key strategies and*

practical guidelines (2nd ed.). London: Kogan Page.

Altschuld, J. W. and Lower, M. A. (1984). Improving mailed questionnaires: Analysis of a 96 percent return rate. *New Directions for Program Evaluation*, 21, 5-18.

Austin, J. T. and Klein, H. J. (1996). Work motivation and goal striving. In K. R. Murphy (Ed.), *Individual differences and behavior in organizations* (pp. 209-257). San Francisco: Jossey-Bass.

Babbie, E. R. (1998). *The practice of social research* (8th ed.). Belmont, CA: Wadsworth.

Bacal, R. (1999). *Performance management*. New York: McGraw-Hill.

Ball, S. (1990). Management as moral technology: A Luddite analysis. In S. Ball (Ed.), *Foucault and education: Disciplines and knowledge* (pp. 153-166). London: Routledge.

Ball, S. (1998). Performativity and fragmentation in postmodern schools. In J. Cater (Ed.), *Postmodernity and the fragmentation of welfare* (pp. 187-203). London: Routledge.

Ball, S. (2004). Performativities and fabrications in the education economy: Towards the performative society. In S. Ball (Ed.), *The RoutledgeFalmer Reader in Sociology of Education* (pp. 143-155). London: Routledge Falmer.

Ball, S. (2006). *Education policy and social class: The selected works of Stephen Ball*. London: Routledge Falmer.

Bandura, A. (1969). *Principal of behavior modification*. New York: Holt, Rinehart and Winston.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50, 248-287.

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Barber, M., Evans, A. and Johnson, M. (1995). *An evaluation of the national scheme of school teacher appraisal: A report for the Department for Education and Employment*. Centre for Successful Schools, Keele University and School of Education, University of Wales, Cardiff.
- Bates, R. A. and Holton, E. F. (1995). Computerized performance monitoring: A review of human resource issues. *Human Resource Management Review*, winter, 267-88.
- Becker, H. S. (1963). *Outsiders: studies in the sociology of deviance*. New York: Free Press.
- Becker, H. S. (1970). *Sociological work: method and substance*. Chicago: Aldine.
- Bedeian, A. G. (1989). *Management* (2nd ed.). New York: Dryden Press.
- Bernardin, H. J., Kane, J. S., Ross, S., Spina, J. D. and Johnson, D. L. (1995). Performance appraisal design, development and implementation. In G. R. Freeis, S. D. Rosen and D. T. Barnum (Eds), *Handbook of human resource management* (pp. 462-93). Cambridge, MA: Blackwell.
- Bernstein, B. (1996). *Pedagogy, symbol control and identity*. London: Routledge.
- Bernstein, B. (1999). Vertical and horizontal discourse: An essay. *British Journal of Sociology of Education*, 20 (2), 157-173.
- Best, J. W. and Kahn, J. V. (1993). *Research in education* (7th ed.). Needham Heights, MA: Allyn and Bacon.
- Best, S. and Kellner, D. (1991). *Postmodern theory: Critical interrogations*. New York: The Guilford Press.
- Biesta, G. (1995). Postmodernism and repoliticization of education. *Interchange*, 26(2), 161-183.
- Black, K. W. (1995). *A study of principal evaluation in Illinois high school districts: Current practice as articulated by*. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign.
- Bolam, R. (1990). *Principal evaluation and appraisal in England*. A draft paper

presented at the AERA Annual Conference, Boston, Friday, April 20th.

- Bolam, R. (2004). Reflections on the NCSL from a historical perspective. *Educational Management Administration & Leadership*, 32 (3), 251-267.
- Bollington, R., Hopkins, D. and West, M. (1990). *An Introduction to teacher appraisal: A professional development approach*. London: Cassell Educational Ltd..
- Bossert, S. T. (1982). The instructional management role of principal. *Educational Administration Quarterly*, 18 (3), 34-64.
- Box, R. C., Marshall, G. S., Reed, B. J. and Reed, C. M. (2001). New public management and substantive democracy. *Public Administration Review*, 61 (5), 608-619.
- Boxley, S. (2003). Performativity and capital in schools. *Journal for critical Education Policy Studies*, 1 (1). Retrieved December 16, 2004, from Web site: <http://www.jceps.com/index.php?pageID=article&articleID=3>
- Bratton, J. and Gold, J. (1999). *Human resource management: Theory and practice* (2nd ed.). London: Macmilland Press.
- Bredrup, H. (1995). Background for performance management. In A. Rolstadås (Ed.), *Performance management: A business process benchmarking approach* (pp. 61-87). London: Chapman & Hall.
- Brown, G. and Irby, B. J. (1997). *The principal portfolio*. Thousand Oaks, CA: Corwin Press.
- Bryman, A. (2001). *Social research methods*. New York: Oxford University Press.
- Bryson, J. M. and Crosby, B. C. (1992). *Leadership for the common good: Tacking public problems in a shared-power world*. San Francisco: Jossey-Bass.
- Bubb, S. and Hoare, P. (2001). *Performance management: Monitoring teaching in the primary school*. London: David Fulton Publishers.
- Burns, T. and Stalker, G. M. (1961). *The management of innovation*. London: Tavistock Publications.
- Burrell, G. and Morgan, G. (1979). *Sociological paradigms and organizational analysis: Elements of the sociology of corporate life*. London:

Heinemann Educational Books.

Buser, R. L. and Banks, F. A. Jr. (1984). The why, what, how, and by whom of evaluating principals. *NASSP Bulletin*, 68 (468), 1-4.

Bush, T. (2004). The National College for School Leadership: Purpose, power and prospects. *Educational Management Administration & Leadership*, 32 (3), 243-249.

Cambridge Education Association (2005). *External adviser: Process guidance notes*. Retrieved July 3, 2005, from CEA Web site:
http://www.cea.co.uk/reform/hb_ea_r5_part1.pdf

Campbell, J. P. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette and L. M. Hough (Eds.), *Handbook of industrial and organizational psychology (Vol. 1)* (pp. 687-732). Palo Alto: Consulting Psychologist Press.

Campbell, J. P., McCloy, R. A., Oppler, S. H. and Sager, C. E. (1993). A theory of performance. In E. Schmitt, W. C. Borman and Associates (Eds.), *Personnel selection in organizations* (pp. 35-70). San Francisco: Jossey-Bass.

Capper, C. A. (1998). Critically oriented and postmodern perspectives: Sorting out the differences and applications for practice. *Educational Administration Quarterly*, 34 (3), 354-379.

Capper, P. and Munro, R. (1990). Professionals or workers? Changing teachers' conditions of service. In S. Middleton, J. Codd and A. Jones (Eds.), *New Zealand education policy today: Critical perspectives* (pp. 150-160). Wellington: Allen & Unwin.

Carey, A. (1967). The Hawthorne studies: A radical criticism. *American Sociological Review*, 32 (3), 403-416.

Carroll, S. J. and Tosi, H. L. (1973). *Management by objectives: Applications and research*. New York: Macmillan.

Cassel, R. N. and Reiger, R. C. (2000). New third force psychology promise to reduce the growing prison population through student-centered high schools. *Education*, 121 (1), 34-37.

Castetter, W. B. (1996). *The human resource function in educational administration* (6th ed.). Englewood Cliffs, NJ: Prentice-Hall.

- Chamberlin, R., Wragg, T., Haynes, G. and Wragg, C. (2002). Performance-related pay and the teaching profession: A review of the literature. *Research Paper in Education*, 17 (1), 31-49.
- Chelimsky, E. (1997). The coming transformations in evaluation. In E. Chelimsky and W. Shadish (Eds.), *Evaluation for the 21st century: A handbook* (pp. 1-26). Thousand Oaks, CA: Sage Publications.
- Codd, J.A. (1990). Managerialism: The problem with today's schools. *Delta*, 44, 17-25.
- Collins, G. (1999). *Principal performance management: The recent New Zealand experience*. A paper presented at the AARE-NZARE Conference on Research in Education. Melbourne, Australia.
- Crawford, M. and Earley, P. (2004). Headteacher performance management: An investigation of the role of the external adviser. *School Leadership & Management*, 24 (4), 377-389.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). London: Sage Publications.
- Creswell, J. W. and Clark, V. L. P. (2007). *Designing and conducting mixed methods research*. London: Sage Publications.
- Crow, G. M. (2004). The National College for School leadership: A North American perspective on opportunities and challenges. *Educational Management Administration & Leadership*, 32 (3), 289-307.
- Crozier M. (1964). *The Bureaucratic Phenomenon*. London: Tavistock Press.
- Cuban, L. (1995). Reform the practice of educational administration through managing dilemmas. In S. L. Jacobson, E. S. Hickcox and R. B. Stevenson (Eds.), *School administration: Persistent dilemmas in preparation and practice* (pp.3-17). Westport, CT: Praeger Publishers.
- Cuff, E. C., Sharrock, W. W. and Francis, D. W. (1998). *Perspectives in sociology* (4th ed.). New York: Routledge.
- Cullen, K. (1997). An evaluation of the United Kingdom's national system of headteacher appraisal. *Studies in Educational Evaluation*, 23 (2), 103-130.
- Cunningham, W. G. and Gresso, D. W. (1993). *Cultural leadership: The*

culture of excellence in education. Needham Heights, MA: Allyn and Bacon.

- Cutler, T. and Waine, B. (1999). Rewarding better teachers? Performance related pay in schools. *Educational Management & Administration*, 27 (1), 55–70.
- Dale, R. (1997). The state and the governance of education: An analysis of the restructuring of the state-education relationship. In A. H. Halsey, H. Lauder, P. Brown and A. S. Wells (Eds), *Education: Culture, economy and society* (pp. 273-282). Oxford: Oxford University Press.
- Darling-Hammond, L., Wise, E. A. and Pease, S. R. (1983). *Teacher evaluation in the organizational context: A review of the literature*. *Review of Educational Research*, 53 (3), 285-328.
- Davies, B. (1973). On the contribution of organizational analysis to the study of educational institutions, in R. Brown (Ed.). *Knowledge, education and cultural change* (pp. 249-295). London: Tavistock Publications.
- Davies, B. (1986). Halting progress: Some comments on recent British educational policy. *Journal of Educational Policy*, 1 (4), 349-359.
- Davies, B. (1994). On the neglect of pedagogy in educational studies and its consequences. *British Journal of In-Service Education*, 20 (1), 17-34.
- Davies, T. R. V. and Luthans, F. (1980). A social learning approach to organizational behavior. *Academy of Management Review*, 5 (2), 281-290.
- Dean, J. (2002). *Implementing performance management: A handbook for schools*. London: Routledge.
- Dening, S. J. and Quinn, T. (2001). Ethical dilemmas for school administrators. *High School Journal*, 84 (4), 43-49.
- Denzin, N. K. (1978). The logic of naturalistic inquiry. In N. K. Denzin (Ed.), *Sociological methods: A sourcebook* (pp. 6-28). New York: McGraw-Hill.
- DES (1989). *School teacher appraisal: A national framework*. London: HMSO.
- DES (1991a). *The Education (School Teacher Appraisal) Regulations 1991* (No. 1511). London: HMSO.
- DES (1991b). *School Teacher Appraisal Circular* (No. 12/91). London: HMSO.

- Dessler, G. (2000). *Human resource management* (8th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- DfEE (1997). *Excellence in Schools*. London: The Stationery Office.
- DfEE (1998a). *Teachers: meeting the challenge of change*. London: The Stationery Office.
- DfEE (1998b). *National standards for headteachers*. London: TTA.
- DfEE (2000a). *Performance management in schools: Performance management framework*. London: DfEE.
- DfEE (2000b). *The Education (School Teacher Appraisal) (England) Regulations 2000 (No. 1620)*. London: The Stationery Office.
- DfES (2001a). *The Education (School Teacher Appraisal) (England) Regulations 2001 (No. 2855)*. London: The Stationery Office.
- DfES (2001b). *Performance Management in Schools: Model performance management policy*. London: DfES.
- DfES (2002). *NPQH consultation: Proposals to introduce a mandatory requirement for first-time headteachers to hold the National Professional Qualification for Headship (NPQH)*. Nottinghamshire: DfES Publications.
- DfES (2003a). *Performance management 2003: Headteacher performance review- practical guidance and activities for governors and headteachers*. London: DfES Publications.
- DfES (2003b). *Performance management 2003: Support guide for governors and headteachers*. London: DfES Publications.
- DfES (2004a). *Guidance on the mandatory requirement to hold the National Professional Qualification for Headship (NPQH)*. Nottingham: DfES Publications.
- DfES (2004b). *National standards for headteachers*. Nottingham: DfES Publications.
- DfES (2005). *Higher standards, better school for all: More choice for parents and pupils*. London: The Stationery Office.
- DfES (2006a). *A guide to the law for school governors*. London: DfES Publications.

- DfES (2006b). *A New relationship with schools: The School Improvement Partner's brief* (2nd ed.). DfES Publications.
- DfES (2006c). *Teachers' and head teachers' performance management guidance*. London: DfES Publications
- DfES (2006d). *The Education (School Teacher Performance Management) (England) Regulation 2006*. London: Statutory Instruments.
- Dill, D.D. (1995). Trough Deming's eyes: A cross-national analysis of quality assurance policies in Higher education. *Quality in Higher Education*, 1 (2), 95-111.
- Dimmock, C. (1996). Dilemmas for school leaders and administrators in restructuring. In K. Leithwood, J. Chapman, D. Corson, P. Hallinger and A Hart (Eds.), *International handbook of educational leadership and administration* (pp. 135-170). Netherlands: Kluwer Press.
- Dimmock, C. (2000). Globalization and societal culture: Redefining schooling and school leadership in the twenty-first century. *Journal of Comparative Education*, 30, 303-314.
- Dimmock, C. and Walker, A. (2005). *Educational leadership: Culture and diversity*. London: Sage Publications.
- Drake, T. L. and Roe, W. H. (1999). *The principalship* (5th ed.). New Jersey: Prentice Hall.
- Dresslar, D. W. (1987). *The use of teacher feedback in the evaluation of school principals*. Dissertation Abstracts International, 47, 2389A.
- Drucker, E. P. (1954). *The practice of management*. New York: Happer & Row.
- Duke, D. L. (1987). *School leadership and instructional improvement*. New York: Random House.
- Duke, D. L. and Stiggins, R. J. (1985). Evaluating the performance of principals: A descriptive study. *Educational Administration Quarterly*, 21(4), 71-98.
- Dunn, W. N. (1994). *Public policy analysis: An introduction*. Englewood Cliffs, NJ: Prentice-Hall.
- Dyer, S. C. (1998). Ideas from New Zealand's primary school boards. *The Education Digest*, 64 (3), 35-40.

- Earley, P. and Evans, J. (2004). Making a difference? Leadership development for headteachers and deputies- ascertaining the impact of the National College for School Leadership. *Educational Management Administration & Leadership*, 32 (3), 325-338.
- Eggers, W. D. (1997). *Performance based contracting*. Los Angeles: Reason Public Policy Institute.
- Etzioni, A. (1960). Two approaches to organisational analysis: a critique and a suggestion. *Administrative Science Quarterly*, 5 (2) 257-78.
- Fancy, H. (2004). *Education reform: Reflections on New Zealand experience*. Paper presented at an education symposium held in Melbourne at the beginning of June 2004. Retrieved December 30, 2004, from Web site: <http://www.minedu.govt.nz/index.cfm?layout=document&documentid=9750&indexid=5451&indexparentid=5437>
- Fidler, B. (1991). Staff appraisal and the statutory scheme in England. *School Organisation*, 15 (2), 95-107.
- Fiedle, F. E. (1967). *A theory of leadership effectiveness*. New York: McGraw-Hill.
- Fitzgerald, T., Youngs, H. and Grootenboer, P. (2003). Bureaucratic control or professional autonomy? Performance management in New Zealand schools. *School Leadership & Management*, 23 (1), 91-105.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental enquiry. *American Psychologist*, 34, 906-11.
- Folger, R. and Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, 32, 115-130.
- Foster, W. P. (1986). Toward a critical theory of educational administration. In T. J. Sergerovanni and J. E. Corbally (Eds.), *Leadership and organizational culture*. Urbana: University of Illinois Press.
- Fowler, F. C. (2000). *Policy studies for educational leaders: An introduction*. Upper Saddle River, NJ: Prentice-Hall.
- Fraenkel, J. R. and Wallen, N. E. (2003). *How to design and evaluate research in education* (5th ed.). New York: McGraw-Hill.

- Gay, L.R. (1992). *Educational research competencies for analysis and application*. New York: Macmillan.
- George, J. M. and Jones, G. R. (2004). *Understanding and managing organizational behavior* (4th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Getzels, J. W., Lipham, J. M. and Campbell, R. F. (1968). *Educational administration as a social process: Theory, research, practice*. New York: Harper & Row.
- Gilbert, B. W. (1990). *Criteria, procedures, and instruments for the evaluation of Texas elementary principals*. Unpublished doctoral dissertation. Baylor University.
- Ginsberg, R. and Thompson, T. (1992). Dilemmas and solutions regarding principal evaluation. *Peabody Journal of Education*, 68 (1), 58-74.
- Glaser, B. G. and Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine Publishing.
- Glasman, N. S. (1992). Toward assessing test score-relates actions of principal. *Peabody Journal of Education*, 68 (1), 108-123.
- Glickman, C. D. (1985). *Supervision and instruction: A developmental approach*. Boston: Allyn and Bacon.
- Goodwin, R. H., Cunningham, M. L. and Childress, R. (2003). The changing role of the secondary principal. *NASSP Bulletin*, 87(634), 26-42.
- Gordon, L. and Whitty, G. (1997). Giving the 'Hidden hand' a helping hand? The rhetoric and reality of neoliberal education reform in England and New Zealand. *Comparative Education*, 33 (3), 453-467.
- Gouldner, A. W. (1954) *Patterns of Industrial Bureaucracy*. Glencoe, Ill.: Free Press.
- Greenberg, J. (1986). Determinants of perceived fairness of performance evaluations. *Journal of Applied Psychology*, 71, 340-342.
- Greenberg, J. (1990). Organizational justice: Yesterday, today and tomorrow. *Journal of Management*, 16, 399-432.
- Greenfield, T. B. and Robbins, P. (1993). *Greenfield on educational administration*. London: Routledge.

- Greenwood, M. S. and Graunt, H. J. (1994). *Total quality management for schools*. London: Cassell.
- Guba, E. and Lincoln, Y. S. (1989). *Fourth generation evaluation*. California: Sage Publications.
- Guba, E. G. and Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin and Y. S. Lincoln (eds.), *Handbook of Qualitative Research* (pp. 105-117). Thousand Oaks, California: SAGE Publications.
- Guest, D. E. (1987). Human resource management and industrial relations. *Journal of Management Studies*, 24(5), 503-521.
- Guinn, K. (1987). Performance management: Not just an annual appraisal. *Personnel*, August, 39-42.
- Gunter, H. M. (2001). Teacher appraisal research networks 1980-2000. *Educational Review*, 53 (3), 241-250.
- Gunter, H. M. (2002). Teacher appraisal 1988-1998: A case study. *School Leadership & Management*, 22 (1), 61-67.
- Gutting, G. (1998). Post-structuralism. In E. Craig (Ed), *Routledge encyclopedia of philosophy*. London: Routledge.
- Habermas, J. (1971). *Knowledge and human interests*. Boston: Beacon Press.
- Hackman, J. R. and Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- Hallinger, P. and Murphy, J. (1985). Assessing the instructional management behavior of principals. *Elementary School Journal*, 86 (2), 217-247.
- Hanson, E. M. (2003). *Educational Administration and organizational behavior* (5th ed.). Boston: Allyn and Bacon.
- Hart, A. W. (1994). *Evaluating principals in light of context and socialization*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Hart, D. M. (1997). Foreword. In E. Spear (Ed.), *Headteacher appraisal* (xi). England: Ashgate.

- Hartle, F., Overall, K. and Baker, C. (2001). *Getting the best out of performance management in your school*. London: Kogan Page.
- Heider, F. (1958). *The Psychology of Interpersonal Relations*. New York: Wiley.
- Hellawell, D. E. (1997). Appraisal of primary school headteachers in schools in England: the perceptions of three LEA appraisal coordinators. *School Leadership & Management*, 17(2), 257-271.
- Hellawell, D. and Hancock, N. (1997). Appraisal for primary heads. *Professional Development Today*, 1, October, 29-39.
- Herzberg, F. (1966). *Work and the nature of man*. Cleveland, Ohio: World.
- Hewton, E. and West, N. (1992). *Appraisal primary headteachers: challenge, confidence, and clarity*. Buckingham: Open University.
- Holman, J. (1997). Headteacher appraisal towards 2000. In C. E. Spear (Ed.), *Headteacher Appraisal* (pp. 1-10). England: Ashgate.
- Hood, C. (1991). A public management for all seasons? *Public Administration*, 69, 3-19.
- Hoy, W. K. and Miskel, C. G. (2001). *Educational administration: Theory, research, and practice* (6th ed.). New York: McGraw-Hill Companies.
- Ilgen, D. R. and Schneider, J. (1991). Performance measurement: A multi-discipline view. In C. L. Cooper and I. T. Robertson (Eds), *International review of industrial and organizational psychology* (Vol.6, pp. 71-108). Chichester: Wiley.
- James, C. and Colebourne, D. (2004). Managing the performance of staff in LEA in Wales: Practice, problems and possibilities. *Educational Management administration & leadership*, 32 (1), 45-65.
- Jarvie, I. C. (1972). *Concepts and society*. London: Routledge & Kegan Paul.
- Jenning, K. and Lomas, L. (2003). Implementing performance management for headteachers in English secondary schools. *Educational Management & Administration*. 31 (4), 369-383.
- Jensen, M. and Meekling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economic*, 3, 305-360.

- Joint Committee on Standards for Educational Evaluation (1988). *The personnel evaluation standards: how to assess systems for evaluation educators*. CA: Sage.
- Jones, E. E., Kannouse, D. E., Kelley, H. H., Nisbett, R. E., Valins, S. and Weiner, B. (1972) (Eds.). *Attribution: Perceiving the Causes of Behavior*. Morristown, NJ: General Learning Press.
- Jones, J. (2001). *Performance management for school improvement: a practical guide for secondary schools*. London: David Fulton Publishers.
- Kaboolian, L. (1998). The new public management: Challenging the boundaries of the management vs. administration debate. *Public Administration Review*, 58(3), 189-193.
- Kanfer, R. and Kantrowitz, T. M. (2002). Ability and non-ability predictors of job performance. In S. Sonnentag (Ed), *Psychological management of individual performance* (pp. 27-50). West Sussex, UK: John Wiley & Sons.
- Kavouri, P. K. (1996) *Innovations in curriculum and administration, school climate and other factors in Greek primary schools: their relationship and impact on students' outcomes*. Unpublished Ph.D. thesis, University of Wales College of Cardiff.
- Kerry, C. (2005). Headteacher performance: An investigation of the role of the governor. *School Leadership & Management*, 25 (5), 473-492.
- Kickert, W. J. M. (1997) (Ed.). *Public management and administration reform in Western Europe*. Cheltenham: Edward Elgar.
- Killen, R. (1991). *Some current teacher assessment practices in the USA*. Paper presented at the Annual Conference of the Australian Teacher Education Association, Melbourne.
- Kuhn, T. S. (1970). *The structure of scientific revolutions*. Chicago: The University of Chicago Press.
- Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. London: Sage Publications.
- Langlois, D. E. and McAdams, R. P. (1992). *Performance appraisal of school management: Evaluating the administrative team*. Lancaster, Pa: Technomic Publishing.

- Lather, P. (1988). Feminist perspectives on empowering research methodologies. *Women's studies international forum*, 11 (6), 569-581.
- Latham, G. P. and Lock, E. A. (1979). Goal setting: A motivational technique that works. *Organizational Dynamics*, 79 (8), 68-80.
- LeCompte, M. D and Goetze, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research*, 52 (1), 31-60.
- Leithwood, K. and Duck, D. (1999). A century's quest to understand school leadership. In J. Murphy and K. S. Louis (Eds.), *Handbook of research on educational administration* (2nd ed.) (pp. 45-72). San Francisco: Jossey-Bass.
- Leithwood, K. and Menzies, T. (1998). Forms and effects of school-based management: A review. *Educational Policy*, 12 (3), 325-346.
- Leithwood, K., Jantzi, D. and Steinbach, R. (2002). Leadership practices for accountable schools. In Leithwood, K. and Hallinger, P. (Eds.), *Second international handbook of educational leadership and administration* (pp. 847-879). Norwell, MA: Kluwer Academic Publishers.
- Leventhal, G. A., Karuza, J. and Fry, W. R. (1980). Beyond fairness: A theory of allocation preferences. In G. Mikula (Eds.), *Justice and social interaction* (pp. 167-218). New York: Springer-Verlag.
- Lincoln, Y. S. and Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.
- Linda, E. A. and Tyler, T. (1988). *The social psychology of procedural justice*. New York: Plenum.
- Locke, E. A. (1968). Toward a theory of task motivation and incentives. *Organizational Behavior and Human Performance*, 3, 157-189.
- Lock, E. A. (1978). The ubiquity of the technique of goal setting in theories of and approaches to employee motivation. *Academy of Management Review*, 3, 594-601.
- Locke, E. A. (1996). Motivation through conscious goal setting. *Applied and Preventive Psychology*, 5, 117-124.
- Locke, E. A. and Latham, G. P. (1990). *A theory of goal setting and task*

performance. Englewood Cliffs: NJ: Prentice-Hall.

Locke, E. A. and Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57, 705-717.

Locke, E. A. and Latham, G. P. (2004). What should we do about motivation theory? Six recommendations for the twenty-first century. *Academy of Management Review*, 29, 388-403.

Luft, J. (1984). *Group processes: An introduction to group Dynamics* (3rd ed.). Palo Alto, CA: Mayfield.

Lunenburg, F. C. and Ornstein, A. C. (2000). *Educational administration: concepts and practices* (3rd ed). CA: Wadsworth.

Luthans, F. and Kreitner, R. (1985). *Organizational behavior modification and beyond: An operant and social learning approach*. Glenview, IL: Scott, Foresman and Co.

Macpherson, R. J. S. (1993). The construction of New Zealand education: A case of high-politics reform? In H. Beare and W. L. Boyd (Eds.), *Restructuring schools: An international perspective on the movement to transform the control and performance of schools* (pp. 69-85). London: The Falmer Press.

Mahoney, P. (2004). *The administration of schools: The changing relationship between schools and the state*. NZ: Parliamentary Library. Retrieved August 5, 2004 from New Zealand Parliamentary Library Web site: <http://www.clerk.parliament.govt.nz/Content/ResearchPapers/04-06SchoolsAccountability.pdf>

Malen, B., Ogawa, R. and Kranz, J. (1990). What do we know about school-based management? A case study of the literature - a call for research. In W. H. Clune and J. F. Witte (Eds), *Choice and control in American education (Vol.2): The practice of choice, decentralization and school restructuring* (pp. 289-342). London: The Falmer Press.

Marrett, C. B. (1990). School organization and the quest for community. In Clune, W.H. and Witte, J.F. (Eds), *Choice and control in American education (Vol. 1): The theory of choice and control in education* (pp. 236-240). London: The Falmer Press.

- Martinez, M. E. (2006). What is metacognition? *Phi Delta Kappan*, 87 (9), 696-699.
- Maslow, A. H. (1954). *Motivation and personality*. New York: Harper and Row.
- Maslow, A. H. (1968). *Toward a psychology of being* (2nd ed.). New York: Van Nostrand.
- Maslow, A. H. (1970). *Motivation and personality* (2nd ed.). New York: Harper and Row.
- Massy, W. F. (1995). *Teaching and learning quality-process review: The Hong Kong programme*. Paper presented at the International Conference on Quality Assurance and Evaluation in Higher Education, Beijing, China, May 6, 1996.
- McAfee, R. B. and Champagene, P. J. (1993). Performance management: A strategy for improving employee performance and productivity. *Journal of Managerial Psychology*, 8(5), 24-32.
- McMahon, A. (2003). Faire Fulong primary school: Five years on. In M. Preedy, R. Glatter and C. Wise (Eds.), *Strategic leadership and educational improvement* (pp. 198-212). London: Paul Chapman.
- McMahon, A and Bolam, R. (1990). *A handbook for secondary schools*. London: Paul Chapman.
- McMillan, J. H. and Schumacher, S. (2001). *Research in education: A conceptual introduction* (5th ed.). New York: Longman.
- Mercer, D. (1996). 'Can they walk on water?': Professional isolation and the secondary headteacher. *School Organisation*, 16 (2), 165-178.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education: Case study research in education*. San Francisco: Jossey-Bass.
- Middlewood, D. (2002). Appraisal and performance management. In T. Bush and L. Bell (Eds.), *The principles and practice of educational management* (pp. 119-234). London: Paul Chapman.
- Middlewood, D. and Cardno, C. (2001) (Eds). *Management teacher appraisal and performance: A comparative approach*. London: Routledge Falmer.
- Middlewood, D. and Cardno, C. (2001). The significance of teacher

performance and its appraisal. In Middlewood, D. and Cardno, C. (Eds). *Management teacher appraisal and performance: A comparative approach* (pp. 1-16). London: Routledge Falmer.

Middlewood, D. and Lumby, J. (1998). *Human resource management in schools and college*. London: Paul Chapman Publishing.

Miles, M. B. and Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Ministry of Education (1997). *Performance management systems: PMS 1-5*. Retrieved August 5, 2004, from Ministry of Education in New Zealand Web site: <http://www.minedu.govt.nz/index.cfm?layout=document&documentid=5694&data=l&goto=00-04#TopOfPage>.

Ministry of Education (1998a). *Interim professional standards for primary, area and secondary school principals: Consultation document*. Wellington: Ministry of Education School Labour Market Policy Unit.

Ministry of Education (1998b). *Principal performance management: A resource for boards of trustees and principals*. Wellington: Ministry of Education School Labour Market Policy Unit.

Ministry of Education (2003). *National Education Guidelines*. Retrieved August 5, 2004, from Ministry of Education in New Zealand Web site: <http://www.minedu.govt.nz/index.cfm?layout=document&documentid=8221&data=l>

Ministry of Education (2004a). *The National Administration Guidelines (NAGs)*. Retrieved August 5, 2004, from Ministry of Education in New Zealand Web site: <http://www.minedu.govt.nz/index.cfm?layout=document&documentid=8187&data=l>

Ministry of Education (2004b). *The National Education Goals (NEGs)*. Retrieved August 5, 2004, from Ministry of Education in New Zealand Web site: <http://www.minedu.govt.nz/index.cfm?layout=document&documentid=8188&data=l>

Ministry of Education (2004c). *The New Zealand Curriculum Framework*. Retrieved August 5, 2004, from Ministry of Education in New Zealand Web site: <http://www.minedu.govt.nz/index.cfm?layout=document&documentid=3561&CFID=3591226&CFTOKEN=72731041>

- Ministry of Education (2004d). *Working in partnership: Information for new school trustees 2004-2007*. Wellington: Ministry of Education School Labour Market Policy Unit.
- Ministry of Education (2005). *Education in the Republic of China (Taiwan)*. Ministry of Education: Taipei.
- Mohrman, A. M., Resnick-West, S. M. and Lawler, E. E. (1989). *Designing performance appraisal system*. San Francisco, CA: Jossey-Bass.
- Morton, J. B. (2002). Professional Education Personnel Evaluation Program of Alabama: Principal evaluation system manual. Montgomery, Alabama: Alabama State Department of Education.
- Mouzelis. N. P. (1967). *Organisation and bureaucracy*. London: Routledge & Kegan Paul.
- Murphy, J. and Rodi, M. S. (2000). *Principal Evaluation: A review*. Paper presented at the Annual Meeting of the American Educational Research Association.
- National Assembly for Wales (2002). *The School Teacher Appraisal (wales) Regulations 2002 (No. 1394)*. London: The Stationery Office.
- National College for School Leadership (2003). *NCSL corporate plan 2003-07*. Nottingham: NCSL.
- New Zealand Qualifications Authority (2006). *Education in New Zealand*. Retrieved April 20, 2006, from New Zealand Qualifications Authority Web site: <http://www.nzqa.govt.nz/about/education.html>
- Newport, R. (2001). *Education in New Zealand. New Zealand School Trustees Association*. Retrieved August 30, 2004, from Web site: http://www.saasso.asn.au/often_Updated/whats_new/archived_whats_new/BeyondP21-NZ.pdf
- Nord, W. R., Brief, A. P., Atieh, J. M. and Doherty, E. M. (1988). In B. M. Staw and L. L. Cummings (Eds.), *Research in organization behavior* (pp. 1-24). Greenwich, CT: JAI Press.
- Novlan, J. F. (1998). New Zealand's past and tomorrow's schools: Reasons, reforms and results. *School Leadership & Management*, 18 (1), 7-18.
- Nygaard, D. D. (1974). *Evaluating administrative performance*. Arlington, VA:

Educational Research Service.

Office for Standards in Education (2002). *Performance management of teachers*. London: Ofsted Publications Centre.

Olssen, M., Codd, J. and A.O'Neill (2004). *Education policy: Globalization, citizenship and democracy*. London: Sage Publications.

Ouchi, W. G. (1981). *Theory Z: how American business can meet the Japanese challenge*. London: Addison-Wesley.

Owens, R. G. (2001). *Organizational behavior in education: Instructional leadership and school reform* (7th ed.). Needham Heights, MA: Allyn and Bacon.

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). London: Sage Publications.

Pearce, J. A. and Robinson, Jr., R. B. (1989). *Management*. New York: Random House.

Perris, L. (1998). Implementing education reform in New Zealand, 1987-1997: A case study. *The Education Reform and Management Series, 1* (1). World Bank, Washington, DC. Human Development Network. (ERIC Document Reproduction Service No. ED 456545)

Perryman, J. (2006). Panoptic performativity and school inspection regimes: Disciplinary mechanisms and life under special measures. *Journal of Education Policy, 21* (2), 147-161.

Piggot-Irvine, E. (2000). Appraisal - The impact of increased control on the State of Play in New Zealand schools. *Journal of Educational Administration, 38* (4), 331-349.

Piggot-Irvine, E. (2003). Key feature of appraisal effectiveness. *The international Journal of Educational Management, 17* (4), 170-178.

Pollitt, C. (1993). *Managerialism and the public services*. Cambridge, MA: Blackwell Publishers.

Pollitt, C. (1988). Models of staff appraisal: some political implications. *Higher Education Review, 20* (2), 7-16.

Pollitt, C. and Bouckaert, G. (2000). *Public management reform: A comparative analysis*. Oxford: Oxford University Press.

- Popham, W. J. (1988). The dysfunctional marriage of formative and summative teacher evaluation. *Journal of personnel Evaluation in Education*, 1 (3), 267-273.
- Prebble, T. and Stewart, D. (1983). Professional assessment and the principal. *Delta*, 32, 45-53.
- Punch, K. F. (2005). *Introduction to social research: Quantitative and qualitative approaches* (2nd ed.). London: Sage Publications.
- Rao, T. V. (2004). *Performance management and appraisal systems: HR tools for global competitiveness*. Thousand Oaks, CA: Sage.
- Razik, T. A. and Swanson, A. D. (1995). *Fundamental concepts of educational leadership and management*. New Jersey: Prentice-Hall.
- Redfern, G. B. (1980). *Evaluating teachers and administrators: A performance objectives approach*. Boulder, CO: Westview Press.
- Reeves, J. (2002). *Performance management in education*. Thousand Oaks, CA: Sage Publications.
- Robbins, S. P. (2000). *Organizational behavior: Concepts, controversies and applications* (9th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Robbins, S. P. (2002). *Essentials of organizational behavior* (7th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Robinson, V., Ward, L. and Timperley, H. (2003). The difficulties of school governance: A layperson's job? *Educational Management & Administration*, 31 (3), 263-281.
- Roethlisberger, F. J. and Dickson, W. J. (1939). *Management and the worker*. Cambridge, MA: Harvard University Press.
- Rogers, C. R. (1972). *On becoming a person*. Boston: Houghton.
- Ross, S. (1973). The economic theory of agency: The principal's problem. *American Economic Review*, 63, 134-139.
- Rossi, R. H., Freeman, H. E. and Lipsey, M. W. (1999). *Evaluation: A systematic approach* (6th ed.). London: Sage.
- Sackney, L. and Mitchell, C. (2002). Postmodern expressions of educational leadership. In K. Leithwood, P. Hallinger (Eds.), *Second handbook of*

educational leadership and administration (pp. 881-913). Nowell, MA: Kluwer Academic Publishers.

Sallis, E. (1993). *Total quality management in education*. London: Kogan Page

Scheurich, J. J. (1994). Social relativism: A postmodernist epistemology for educational administration. In S. J. Maxcy (Ed.), *Postmodern school leadership: Meeting the crisis in educational administration* (pp. 17-46). Westport, CT: Praeger.

Schneier, C. E., Beatty, R. W. and Baird, L. S. (1987). *The performance management sourcebook*. Amherst, MA: Human Resource Development Press.

Schuler, R. S. (1995). *Managing human resources* (5th ed.). New York: West Publishing Company.

Scott, W. R. (2003). *Organizations: Rational, natural and open systems* (5th ed.). Upper Saddle River, NJ: Prentice-Hall.

Sergiovanni, T. J. (1995). *The principalship: A reflective practice perspective* (3rd ed.). Needham Heights, MA: Allyn and Bacon.

Seyfarth, J. T. (2004). *Human resources management for effective schools* (4th ed.). Boston: Allyn and Bacon.

Silver, P. F. (1983). *Educational administration: Theoretical perspectives on practice and research*. New York: Harper & Row.

Silverman, D. (1968). Formal Organisations or Industrial Sociology: towards a Social Action Analysis of Organizations. *Sociology* 2 (2), 221-38.

Sirkin, R. M. (1999). *Statistics for the social sciences* (2nd ed.). London: Sage Publications.

Skinner, B. F. (1969). *Contingencies of reinforcement*. Englewood Cliffs: Prentice-Hall.

Smith, R. E. (2001). *Human resources administration: A school-based perspective* (2nd ed.). New York: Eye on Education.

Sonnentag, S. and Frese, M. (2002). Performance concepts and performance theory. In S. Sonnentag (Ed), *Psychological management of individual performance* (pp. 3-25). West Sussex, UK: John Wiley & Sons.

- Southwood, G. (2004). A response from the National College for School Leadership. *Educational Management Administration & Leadership*, 32 (3), 339-354.
- Spangenberg, H. (1994). *Understanding and implementing performance management*. Cape Town: Juda.
- Spear, C. E. (1997). Introduction. In C. E. Spear (Ed.), *Headteacher Appraisal* (pp. xiii-xvii). England: Ashgate.
- Stajkovic, A. D. and Luthans, F. (1997). A meta-analysis of the effects of organizational behaviors modification on task performance, 1975-95. *Academy Management Journal*, 40, 1122-1149.
- Steers, R. M. and Black, J. S. (1994). *Organizational behavior* (5th ed.). New York: HaperCollins College Publishers.
- Steers, R. M., Mowday, R. T. and Shapiro, D. L. (2004). The future of work motivation theory. *Academy of Management Review*, 29, 379-387.
- Storey, A. (2000). A leap of faith? Performance pay for teachers. *Journal of Education Policy*, 15 (5), 509-523.
- Storey, J. and Sisson, K. (1993). *Managing human resources and industrial relations*. Buckingham: Open University Press.
- Stufflebeam, D. L. (2003). *The CIPP model for evaluation*. Paper presented at 2003 Annual Conference of the Oregon Program Evaluators Network (OPEN). Portland, Oregon.
- Stufflebeam, D. and Nevo, D. (1993). Principal evaluation: New directions for improvement. *Peabody Journal of Education*, 68 (2), 24-46.
- Stufflebeam, D. and Pullin, D. (1998). Achieving legal viability in personnel evaluations. *Journal of Personnel Evaluation in Education*, 11 (3), 215-230.
- Sturman, A. (1990). Curriculum decision-making at the school level. In J. Chapman (Ed.), *School-based decision-making and management* (pp. 279-297). London: The Falmer Press.
- Tashakkori, A. and Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. London: Sage Publications.
- Thibaut, J. and Walker, L. (1975). *Procedural justice: A psychological analysis*.

Hillsdale, NJ: Erlbaum.

- Thomas, C. and Vomberg, J. A. (1991). Evaluating principal: new requirements, directions for the '90s. *NASSP Bulletin*, 75 (539), 59-64.
- Timperly, H. S. (1998). Performance appraisal: Principals' perspectives and some implications. *Journal of Educational Administration*, 36 (1), 44-58.
- Tomlinson, H. (2000). Proposals for performance related pay for teachers in English schools. *School Leadership & Management*, 20 (3), 281-298.
- Tomlinson, S. (2005). *Education in a post-welfare society* (2nd ed.). England: Open University Press.
- Torrington, D. and Hall, L. (1995). *Personnel management: HRM in action* (3rd ed.). Hemel Hempstead: Prentice Hall.
- TTA and Ofsted (1996). *Review of headteacher and teacher appraisal: Summary of evidence*. London: authors.
- Tubbs, M. E. (1986). Goal setting: A meta-analytic examination of the empirical evidence. *Journal of Applied Psychology*, 71, 474-483.
- Turner, B. S. (1990). Periodization and politics in the postmodern. In B. S. Turner (Ed.), *Theories of modernity and postmodernity* (pp. 1-13). Newbury Park, CA: Sage.
- Valentine, J. W. and Bowman, M. L. (1991). Effective principal, effective school: Does research support the assumption? *NASSP Bulletin*, 75(539), 1-7.
- Visscher, A. J. and Coe, R. (2003). School performance feedback systems: Conceptualisation, analysis and reflection. *School Effectiveness and School Improvement*, 14 (3), 321-349.
- Vroeijenstijn, A. I. (1995). *Improvement and accountability: Navigating between Saylla and Charybdis- Guide for external quality assessment in higher education*. London: Jessica Kingsley.
- Vroom, V. H. (1964). *Work and motivation*. New York: Wiley.
- Waldersee, R. and Luthans, F. (2001). Social learning analysis of behavioral management. In C. M. Johnson, W. K. Redmon and T. C. Mawhinney (Eds.), *Handbook of organizational performance: Behavior analysis and management* (pp. 391-413). New York: The Haworth Press.

- Walker, A. (2000). Hong Kong principals' dilemmas: Basic management and consequence. In A. Walker and C. Dimmock (Eds.), *School leadership and administration: Adopting a cultural perspective* (pp. 205-221). New York: Routledge Falmer.
- Walker, A. and Dimmock, C. (2000). Leadership dilemmas of Hong Kong principals: Sources, perception and outcomes. *Australian Journal of Education*, 44 (1), 5-25.
- Walker, A. and Dimmock, C. (2004). *The international role of the NCSL: Tourist, colporteur or confrere? Educational Management Administration & Leadership*, 32 (3), 269-287.
- Walker, L., Lind, E. A. and Thibaut, J. (1979). The relation between procedural and distributive justice. *Virginia Law Review*, 65, 1401-1420.
- Walsh, K. (1995) *Public services and market mechanisms: Competition, contracting and the new public management*. London: Macmillan.
- Water, D. (1997). Preparation for headteacher appraisal. In C. E. Spear (Ed.), *Headteacher Appraisal* (pp. 77-90). England: Ashgate.
- Webb, L. D. and Norton, M. S. (1999). *Human resources administration: Personnel issue and need in education* (3rd ed.). Saddle River, New Jersey: Prentice-Hall.
- Weber, M. (1964). *The theory of economic and social organisation*. London: Collier Macmillan.
- Weiner, B. (1974). *Achievement motivation and attribution theory*. Morristown, N.J.: General Learning Press.
- Weiner, B. (1980). *Human Motivation*. NY: Holt, Rinehart & Winston.
- Weiner, B. (1985). An attributional theory of achievement, motivation and emotion. *Psychological Review*, 92, 548-573.
- Weiner, B. (1986). *An attributional theory of motivation and emotion*. New York: Springer-Verlag.
- Welsh Assembly Government (2002). *Performance management guidance*. Welsh: Welsh Assembly Government. Retrieved January 22, 2004, from Web site: <http://www.wales.gov.uk/subieducationtraining/content/teacherlearning/pm-gg02-e.pdf>

- West-Burnham, J. (2001). Creating a performance culture. In West-Burnham, J., O'Neill, J. and Bradbury, I. (Eds.). *Performance management in schools: How to lead and manage staff for school improvement* (pp. 15-26). London: Person Education.
- West-Burnham, J., O'Neill, J. and Bradbury, I. (2001) (Eds.). *Performance management in schools: How to lead and manage staff for school improvement*. London: Person Education.
- William, R. S. (1998). *Performance management: Perspectives on employee performance*. London: Thomson Learning.
- Williamson, O. E. (1975). *Markets and hierarchies: Analysis and antitrust implications*. New York: Free Press.
- Williamson, O. E. (1985). *The economic institutions of capitalism*. New York: Free Press.
- Wissler, D.F. and Oritz, F. I. (1986). The decentralization process of school systems: A review of the literature. *Urban Education*, 21(3), 280-294.
- Woodhouse, D. (1995). Government and institution. In the *proceedings of the third meeting of the International Network Quality Assurance Agencies in Higher Education* (pp.36-41). Utrecht, the Netherlands: INQAAHE.
- Worthen, B. R., Sanders, J. R. and Fitzpatrick, J. L. (1997). *Program evaluation: Alternative approaches and practical guideline* (2nd ed.). New York: Longman Publishers.

Chinese Bibliography

- Bai, L. M. (1997). *A study on the relationship between principals' leadership styles and teachers' work motivation*. Unpublished masters' dissertation, Taipei Municipal University of Education, Taipei.
- Cai, H. X. (2000). *A study on the decision making of school principal selection of primary schools*. Unpublished masters' dissertation, National Taichung University of Education, Taichung.
- Cai, J. X. (1999). *A study of the relationship among transformational and transactional leadership, school culture and school effectiveness in junior high schools in Taiwan*. Unpublished doctoral dissertation, National Taiwan Normal University, Taipei.
- Cai, J. Z. (2004). *A study on the planning of evaluation system for primary school principals in Kaohsiung City*. Unpublished masters' dissertation, National Sun Yat-sen University, Kaohsiung.
- Cai, X. Y. (2000). Ideas on designing mentor systems for novice principals. *Educational Resources and Research*, 37, 37-51.
- Cai, Z. X. (2003). *A study on the relationship between principals' transformational leadership and school effectiveness of junior high schools in Yunlin, Chiayi, and Tainan Region, Taiwan*. Unpublished masters' dissertation, National Chiayi University of Education, Chiayi.
- Central Personnel Administration, Executive Yuan (2004). *The Scheme of conducting performance bonus and performance management for administrative institutions at local and central government level: Workbook*. Taipei: Central Personnel Administration.
- Chen, B. S. (2001). *A study on implementing principal selection policy of primary and junior high schools*. Unpublished doctoral dissertation, National Taiwan Normal University, Taipei.
- Chen, D. X. (2003). *A study on the relationship between the principals' leadership styles and the teachers' job involvement in the primary schools in the Ping-Tung Country*. Unpublished masters' dissertation, National Chiayi University of Education, Chiayi.
- Chen, F. M. (2003). *A study of the relationship between principal leadership*

- styles and school organisation effectiveness*. Unpublished masters' dissertation, National Ping-Tung University of Education, Ping-Tung.
- Chen, J. Y. (2003). *A study of the relationship between principal curriculum leadership and school effectiveness in primary schools: Examples of Yunlin, Chiayi, and Tainan areas*. Unpublished masters' dissertation, National Chiayi University of Education, Chiayi.
- Chen, M. E. (2002). *A study on using Fuzzy Delphi Method to construct indicator system of primary school principals' evaluation*. Unpublished masters' dissertation, TamKang University, Taipei.
- Chen, M. X. (2002). *A study on the relationship between principals' curriculum leadership and teachers' teaching effectiveness in primary schools: An example of Taipei County*. Unpublished masters' dissertation, National Chengchi University, Taipei.
- Chen, M. Yan. (1997). *A study on the relationship between principal instruction leadership and teacher teaching self-efficacy*. Unpublished masters' dissertation, Taipei Municipal University of Education, Taipei.
- Chen, M. Yao. (2005). *A study of appraisal criteria for principals of junior high schools*. Unpublished masters' dissertation, National Kaohsiung Normal University, Kaohsiung.
- Chen, Q. R. (2000). *A study on the relationship between principal transformational leadership and teacher job satisfaction of primary schools*. Unpublished masters' dissertation, National HsinChu University of Education, Hsin Chu.
- Chen, S. C. (2000). *A study on the relationships among principals' transformational leadership, transactional leadership and school effectiveness*. Unpublished masters' dissertation, National Ping-Tung University of Education, Ping-Tung.
- Chen, S. H. (2003). *A study of the relationship between education reform pressure and professional development needs*. Unpublished masters' dissertation, National Ping-Tung University of Education, Ping-Tung.
- Chen, S. M. (1981). Examining the personnel management system of compulsory education. *Monthly Journal of Taiwan Educational Guidance*, 31 (50), 20.
- Chen, W. Y. (1995). *A study on the relationships among principal leadership,*

organisational climate and teachers' alienation at primary schools. Unpublished masters' dissertation, National Chiayi University of Education, Chiayi.

Chen, X. X. (2003). *A study on the relationships among principals transformational leadership, the development of schools vision and teachers organisation commitment in Kaohsiung primary schools.* Unpublished masters' dissertation, National Kaohsiung Normal University, Kaohsiung.

Chen, Z. B. (2005). *A study of primary school principal evaluation: A case of primary school in Ping-Tung.* Unpublished masters' dissertation, National Ping-Tung University of Education, Ping-Tung.

Chen, Z. L. (1999). Economic reforms of New Zealand government: Theory, context and learning. In Zhan (ed.), *New public management: Theory and practice of government reengineering* (183-209). Taipei: Wu-Nan Press.

Cheng, H. H. (2002a). *A study of the evaluation system for primary and junior high school principals.* Unpublished doctoral dissertation, National Chengchi University, Taipei.

Cheng, H. H. (2002b). Meta-evaluation standards for school principal appraisal. *Journal of National Taipei Teachers College*, 15, 493-526.

Cheng, H. H. (2002c). Deficiencies and coping strategies of implementing principal evaluation: Analysis of meta-evaluation. *Inservice Education Bulletin*, 19 (6), 8-26.

Cheng, H. H. (2003). Policy development of headteacher appraisal in the UK and its implications. *Journal of National Tainan Teachers College*, 37 (1), 129-153.

Cheng, H. H. (2004a). Responsibilities and leadership roles of local educational authorities in the post-centralisation era. *Journal of Education Research*, 119, 80-93.

Cheng, H. H. (2004b). Educational administration. In M. Q. Qin (Ed.). *Introduction of Education* (355-414). Taipei: High Education.

Committee of Education Reform for the Executive Yuan (1996). *Final report of education reform for the Executive Yuan.* Taipei: Executive Yuan.

- Fan, Z. W. (2001). *A study of the relationships among principal's leadership behaviour, teacher's organisational commitment, and school's organisational performance in primary schools*. Unpublished doctoral dissertation, National Taiwan Normal University, Taipei.
- Feng, Q. H. (2002). Review and prospective on principal preparation system in Taipei municipal primary schools. In W. L. Lin (ed.), *Proceedings of international conference on school leader preparation, licensure/certification, selection, evaluation, and professional development* (pp. 45-56). Taipei: National Taipei University of Education.
- Guo, G. B. (2000). *A study on achievements evaluation index structure of a principal's management of a primary school*. Unpublished masters' dissertation, National Taipei University of Education, Taipei.
- Guo, Z. Y. (2004). Information approaching the reality: Applications of 360 degree feedback technique on educational personnel evaluation. *Educational Research & Information*, 12 (4), 107-128.
- He, S. F. (1995). *A study of the relationship between Taiwan primary school principals' transformational leadership and school organisational climate*. Unpublished masters' dissertation, National Hsin-Chu University of Education, Hsin-Chu.
- Hong, J. Q. (2003). *A study of the national university funding system: Under a trend of thoughts of new public management*. Unpublished masters' dissertation, National Taipei University, Taipei.
- Hou, S. C., Zhang, S. Z., Lin, Y. S., Zhu, Z. Y., Liu, Z. F., and Chen, Q. M. (2000). *A study of principal evaluation in Taipei County: Project report for Bureau of Education*. Taipei: Taipei County Government.
- Hu, Y. J. (2001). *A study on constructing primary school principal's evaluation indicators in Keelung*. Unpublished masters' dissertation, National Taipei University of Education, Taipei.
- Huang, B. X. (2003). *A study on the relationships among principal transformational leadership, school organisational climate and teachers' organisational citizenship behaviours*. Unpublished masters' dissertation, National Kaohsiung Normal University, Kaohsiung.
- Huang, C. Y. (1998). *A study on the relationship between principals' transforming leadership and parents' participation in school education*.

Unpublished masters' dissertation, National Dong Hwa University, Hualien.

Huang, G. G. (2001). *Philosophy of social science*. Taipei: Psychological Publishing.

Huang, J. X. (2001). *Comparative system of school-based management*. Taipei: Wu-Nan Press.

Huang, K. H. (1988). *Educational administration*. Taipei: Tung Hua.

Huang, L. M. (2003). *A study on the relationships among principal transformational leadership, transactional leadership and teachers' job involvement*. Unpublished masters' dissertation, National Chengchi University, Taipei.

Huang, N. Y. (2004). *Post-modern ethics in school administration and the resolution for its dilemma*. Bulletin of Educational Research, 50 (3), 1-29.

Huang, R. Q. (1986). *Critical theory and modern sociology*. Taipei: ChuLiu Press.

Huang, W. S. (2002). *A study on implementation process and standards of school-based principal evaluation in Taipei primary schools*. Unpublished masters' dissertation, National Taipei University of Education, Taipei.

Huang, Y. M. (1999). *A study on the relationships among principal leadership, teacher work commitment and school performance*. Unpublished doctoral dissertation, National Chengchi University, Taipei.

Huang, Z. K. (1999). *The feasibility of implementing TQM in the classroom management of primary schools*. Unpublished masters' dissertation, National Ping-Tung University of Education, Ping-Tung.

Huang, Z. X. (2002). *School administrative dialogues: Micro-politics of powerful behaviours in organisations*. Taipei: Wu-Nan Press.

Jiang, K. Z. (2001). *A study on the administrative role, job stress and coping strategy of principals in the primary schools in Taiwan*. Unpublished masters' dissertation, National Chung Cheng University, Chaiyi.

Jiang, W. X. (1977). Reflection and improvement on the current personnel management system of primary and junior high schools. *The Educator Monthly*, 125, 80.

- Jiang, W. X. (1998). Feasibility of principal evaluation. *New Horizon Bimonthly For Teachers*, 96, 10-18.
- Jiang, Z. K. (1994). *A study on the relationship between principals' leadership styles and teachers' teaching self-efficacy*. Unpublished masters' dissertation, Taipei Municipal University of Education, Taipei.
- Ke, B. T. (2001). *A study of the principal selection system of primary schools: Examples in Kaohsiung and Pingtung areas*. Unpublished masters' dissertation, National Ping-Tung University of Education, Ping-Tung.
- Li, A. M. (2002). Developing school-based leadership programs to coping with the new tendency of principal instructional leadership. In W. L. Lin (ed.), *Proceedings of international conference on school leader preparation, licensure/certification, selection, evaluation, and professional development* (pp. 131-146). Taipei: National Taipei University of Education.
- Li, X. B. (2000). *A study of the relationship between primary school principals' instructional leadership and teachers' teaching effectiveness*. Unpublished masters' dissertation, National Hsin-Chu University of Education, Hsin-Chu.
- Li, Z. H. (2003). *A study on the principal's transformational leadership and the educational quality management in Taipei primary schools*. Unpublished masters' dissertation, Taipei Municipal University of Education, Taipei.
- Liang, D. C. (2001). *A study of the relationship between principals' transformation leadership and teachers' work satisfaction*. Unpublished masters' dissertation, National Taichung University of Education, Taichung.
- Lin, H. H. (2002). *A study of the relationship between primary school principals' Instructional leadership and teachers' teaching effectiveness in Taipei County*. Unpublished masters' dissertation, National Taipei University of Education, Taipei.
- Lin, H. Q. (2000). Principal certification system: A view from principal preparation and professional development. *Educational Resources and Research*, 37, 21-25.
- Lin, Han. Z. (2002). *A study of the relationship between principals' transformation leadership and teachers' efficacy*. Unpublished masters'

dissertation, National Chung Cheng University, Chaiyi.

- Lin, Hui. Z. (2001). *A study of the relationships among principals' gender role, transformational leadership and school effectiveness in junior high schools*. Unpublished masters' dissertation, National Chengchi University, Taipei.
- Lin, J. H. (2001). *Management*. Taipei: Best-Wise Publisher.
- Lin, J. Y. (1998). *A study on the relationship between principals' cognitive styles, leadership styles and leadership effectiveness: A case study of primary schools in Hualien*. Unpublished masters' dissertation, National Dong Hwa University of Education, Hualien.
- Lin, M. D. (2002). *Principalship: Approaches of Job analysis and roles*. Taipei: Wu-Nan Press.
- Lin, Q. R. (1998). *Personnel management*. Taipei: Chien Cheng Publisher.
- Lin, R. Y. (2005). *A study of the relationship between working stress and professional burnout of principals in primary schools: Exemplification by primary schools in Kaohsiung region*. Unpublished masters' dissertation, National Ping-Tung University of Education, Ping-Tung.
- Lin, T. Y., Wu, Q. S., Zhang, D. R., Tang, Z. M., Ding, Y. G., Zhou, C. R., and Cai, J. Z. (2003). *Educational administration*. Taipei: Psychological Publishing.
- Lin, W. L. (1999). *Principals' Job description, preparation, induction and in-service training*. Paper presented at the Fourth Conference of Contemporary Education Forum. National Taipei University of Education.
- Lin, Y. Y. (2003). *A study of the relationship between principal's transformational leadership and school organisational execution for primary schools in Taipei City and Taipei County*. Unpublished masters' dissertation, Taipei Municipal University of Education, Taipei.
- Liu, M. H. (2002). *A study on principal selection stress and coping strategies in primary schools of Taipei City*. Unpublished masters' dissertation, National Taipei University of Education, Taipei.
- Luo, M. Z. (2002). *A study on the relationship between principal's leadership behaviours and teacher's job satisfaction in primary schools of Taichung City*. Unpublished masters' dissertation, National Taichung University,

Taichung.

- Luo, Q. S. (1995). *A study on principal performance rating system of Taiwan Provincial junior high schools*. Unpublished masters' dissertation, National Chengchi University, Taipei.
- Luo, Y. H. (2000). *A study on performance evaluation indicators of junior high school principals*. Unpublished masters' dissertation, National Taiwan Normal University, Taipei.
- Ma, R. Z. (2003). *A study of the relationship between principals' administrative communication behaviours and leadership effectiveness in Kaohsiung municipal junior high schools*. Unpublished masters' dissertation, National Kaohsiung Normal University, Kaohsiung.
- Ministry of Education (2004). *The list of primary schools and junior high schools*. Taipei: MOE.
- Peng, Y. Z. (1997). *The study of the relationships among principal's leadership styles, teachers' work values and organisational commitment in primary schools*. Unpublished masters' dissertation, National Chengchi University, Taipei.
- Qi, D. Z. (1999). *Human resource management: Theory and practice*. Taipei: SanMin Press.
- Qin, M. Q. (1998). *Educational administration: Theory and practice*. Taipei: Wu-Nan Press.
- Qin, M. Q. (2002). Reflections on principal selection system of primary and junior high schools. *New Horizon Bimonthly For Teachers*, 18, 15-19.
- Qin, M. Q. & Huang, Z. Y. (2002). *Methodology of Educational administration*. Taipei: Wu-Nan Press.
- Qiu, C. T. (2000). *Public policy*. Taipei: ChuLiu Press.
- Su, J. L. (1997). *Evaluation in higher education*. Taipei: Wu-Nan Press.
- Tang, Z. M. (2002). Comments and opinions on the principal selection system of primary and junior high schools. *New Horizon Bimonthly For Teachers*, 118, 20-27.
- Wang, D. Y. (2004). *A study of principal evaluation system of primary schools in Yulin County*. Unpublished masters' dissertation, National Chung

Cheng University of Education, ChiaYi.

- Wang, L. Y. (2000). *Principal evaluation scales of primary and junior high schools in Tainan County*. Tainan: Bureau of Education.
- Wang, L. Y. and Xie, W. Q. (2002). A study of preparation curriculum for educational administrative leaders. In W. L. Lin (ed.), *Proceedings of international conference on school leader preparation, licensure/certification, selection, evaluation, and professional development* (pp. 99-104). Taipei: National Taipei University of Education.
- Wang, R. Z. (1998). *Educational administration*. Taipei: Wu-Nan Press.
- Wang, R. Z., Lin, M. D., Zhang, Z. M., Huang, N. Y., and Yang, Z. S. (1999). *Educational administration*. Kaohsiung: Liwen Publisher.
- Wang, Y. Z. (2003). *The status of and relationship between primary school principals' transformational leadership, transactional leadership, and community involvement in school education*. Unpublished masters' dissertation, National Chung Cheng University, Chaiyi.
- Wu, D.Y. (2001). *A study on current status of evaluating primary school principals in Miaoli County*. Unpublished masters' dissertation, National Hsin-Chu University of Education, Hsin-Chu.
- Wu, H. Y. (1995). *A study on leadership effectiveness of primary school principals in seven counties*. Unpublished masters' dissertation, National University of Tainan, Tainan.
- Wu, J. S. (2000). *A study on principal evaluation system of primary schools*. Unpublished masters' dissertation, National Taichung University of Education, Taichung.
- Wu, M. L. and Lin, J. Y. (1997). *Human resource management: Theory and practice*. Taipei: Best-Wise Publisher.
- Wu, M. X. (2000). *A study of primary school principals' transformational leadership and school effectiveness*. Unpublished masters' dissertation, National Taichung University of Education, Taichung.
- Wu, Q. J., Chen, M. Y., Yang, Z. S., and Yan, G. L. (2001). *Educational administration*. Taipei: Wu-Nan Press.
- Wu, Q. S. (1992). *School effectiveness*. Taipei: Wu-Nan Press.

- Wu, Q. S. (1998). An exploration of educational reform movement after Martial Law lifted in Taiwan. *Bulletin of the National Institute of Education Resources and Research*, 23, 261-275.
- Wu, Q. S. (2001). *A study on constructing the standards of professional ethics for educational administrators*. The final report of monographic research project sponsored by the National Science Council, Executive Yuan. (NSC 89-2413-H133-010-S)
- Wu, Q. S. (2002). Myths and reflections on current principal selection system. *New Horizon Bimonthly For Teachers*, 118, 7-14.
- Wu, Q. S. (2004). *School administration* (6th ed.). Taipei: Psychological Publishing.
- Wu, Q. S., Huang, M. F., and Xu, W. P. (2002). *Education accountability*. Taipei: High Education.
- Wu, Q. S. and Zhang, S. Z. (2001). Reflection and improvement of current principal selection system for primary and junior high schools. *Taiwan Education Review*, 605, 2-9.
- Wu, Q. S. and Zhang, S. Z. (2004). Importance of 360 degree feedback and its applications on educational supervision. *Journal of Education Research*, 123, 97-113.
- Wu, S. J. (2006). *A study of junior high school principal evaluation system in Taipei County*. Unpublished masters' dissertation, National Taiwan Normal University, Taipei.
- Wu, S. Y. (2003). *Principal evaluation standards, assessment process and methods of primary schools*. Unpublished masters' dissertation, National Taipei University of Education, Taipei.
- Wu, Z. R. (2002). *A study of evaluation indicators of primary school principal: A case in southern counties/cities of Taiwan*. Unpublished masters' dissertation, National Ping Tung University of Education, Ping-Tung.
- Xie, P. Y. (1999). *A study on the relationships among principals' leadership styles, relationship quality and teachers' organisational citizenship behaviours*. Unpublished masters' dissertation, National Taipei University of Education, Taipei.
- Xie, S. F. (2003). *A study on the feasibility of applying 360 degree feedback*

technique on teacher performance appraisal in Taiwan junior high schools. Unpublished masters' dissertation, Yuan Ze University, Tao-Yuan.

Xie, W. Q. (1999). Preparation, appointment and evaluation system of primary and junior high school principals. *Educational Resources and Research*, 28, 1-5.

Xie, W. Q. (2004). *Educational administration*. Taipei: High Education.

Xie, W. Q., Lin, X. F., Zhang, D. R., & Zhang M. H. (1995). *Educational administration*. Taipei: National Open University.

Xu, S. Y. (2000). *A study on the relationship between principal's transformational leadership and teachers' morale in primary schools*. Unpublished masters' dissertation, National Taipei University of Education, Taipei.

Xue, D. B. (2003). *A study on principal's curriculum leadership and school effectiveness in junior high schools: Taking the development of nine-year curriculum as an instance*. Unpublished masters' dissertation, National Kaohsiung Normal University, Kaohsiung.

Yan, Z. A. (2003). *Feasibility study on building multiple (360 degree) feedback mechanism of the schools*. The final report of monographic research project sponsored by the National Science Council, Executive Yuan. (NSC 92-2413-H-119-001)

Yang, M. X. (2000). *A study of principal selection system implemented in Taipei municipal primary schools*. Unpublished masters' dissertation, National Taipei University of Education, Taipei.

Yang, S. K. (2002). *Science theory and pedagogic development*. Taipei: Psychological Publishing.

Yang, Y. Z. (2003). *A study on the relationship between principal's leadership and teachers' teaching efficacy in primary schools: Taking primary schools in Taoyuan County as examples*. Unpublished masters' dissertation, Yuan Ze University, Tao-Yuan.

Ye, X. R. (2002). *The influence of principals' transformational leadership on teachers' morale: An example of primary schools in Changhua County*. Unpublished masters' dissertation, National Changhua University of Education, Changhua.

- Ye, X. Z. (1985). *Philosophy of education*. Taipei: SanMin Press.
- You, S. H. (2002). *A study of principals' charismatic leadership, teachers' organisational commitment and job satisfaction in primary schools*. Unpublished masters' dissertation, National Ping-Tung University of Education, Ping-Tung.
- Zeng, J. F. (2003). *A study of the relationships among principals' transformational leadership, transactional leadership and teachers' organisational citizenship behaviour in primary schools of Taipei County*. Unpublished masters' dissertation, Fu Jen Catholic University, Taipei.
- Zeng, Z. F. (2003). *A study on the relationship between principals' instructional leadership and school effectiveness in junior high schools of Tao-Yuan County*. Unpublished masters' dissertation, National Taiwan Normal University, Taipei.
- Zhan, Y. J. (2003). *A study on portfolio as an assessment tool for primary school principals*. Unpublished masters' dissertation, National Hsin-Chu University, Hsin Chu.
- Zhan, Z. Y. (1999). New public management and national development. In Z. Y. Zhan (ed.), *New public management: Theory and practice of government reengineering* (pp. 71-83). Taipei: Wu-Nan Press.
- Zhang, B. J. (1997). *A study of the relationship among principals' instructional leadership, school instructional climate and teachers' teaching effectiveness in junior high schools*. Unpublished doctoral dissertation, National Chengchi University, Taipei.
- Zhang, C. J. (1996). *A study of the relationship between principals' instructional leadership and school effectiveness in primary schools*. Unpublished masters' dissertation, National Hsin-Chu University of Education, Hsin Chu.
- Zhang, C. X. (1989). *Psychological dictionary of Zhang*. Taipei: Tung Hua.
- Zhang, D. F. (2002). Exploring better schemes of principal preparation curriculum. In W. L. Lin (ed.), *Proceedings of international conference on school leader preparation, licensure/certification, selection, evaluation, and professional development* (p. 117). Taipei: National Taipei University of Education.
- Zhang, D. F. (2004). Educational accountability and school reconstruction in

- America. *Journal of Education Research*, 124, 124-132.
- Zhang, D. R. (1998). Promoting school quality by principal evaluation: purposes, criteria and procedures. *New Horizon Bimonthly For Teachers*, 96, 4-9.
- Zhang, D. R. (1999). Preliminary construction of principal evaluation system of primary and junior high schools. *Journal of Primary Education*, 7, 15-38.
- Zhang, D. R., and Jian, X. C. (2001). Analysis and innovation of principal selection system in Taipei municipal primary and junior high schools. *Journal of Taipei Municipal University of Education*, 32, 47-66.
- Zhang, D. R., and Li, J. D. (2002). Educational accountability movement in Britain and America and its implications on school management. *Contemporary Education Forum*, 7, 145-153.
- Zhang, D. R., Wang, B. J., and Ding, Y. G. (2003). Professional capabilities standards of principals and resource files. *Journal of Primary Education*, 15, 109-136.
- Zhang, F. F. (2002). Evaluation criteria of qualitative research: Different paradigms and tendency. *Journal of Primary Education*, 12, 301-352.
- Zhang, H. C. (2000). *Strategic human resource management*. Taipei: Yang-Chih.
- Zhang, H. Y. (2001). *A study on the relationship between principals' transformational leadership and the school effectiveness in primary schools of Taipei County and Taipei City*. Unpublished masters' dissertation, National Taipei University of Education, Taipei.
- Zhang, Q. C. (1996). *A study of the principal performance rating in Taiwan primary schools*. Unpublished masters' dissertation, Taipei Municipal University of Education, Taipei.
- Zhang, Q. X. (1995). *The influences of transformational and transactional leadership of primary school principals on the culture characteristics and effectiveness of school organisation*. Unpublished doctoral dissertation, National Kaohsiung Normal University, Kaohsiung.
- Zhang, R. S. (1986). *Public administration*. Taipei: SanMin Press.
- Zhang, S. G. (2003). *A study on the relationship between principals'*

transformational leadership and school effectiveness of junior high schools in Taoyuan County. Unpublished masters' dissertation, National Taiwan Normal University, Taipei.

Zhang, W. L. (1999). *Human resource management.* Taipei: Hua Tai.

Zhang, X. K. (2003). *A study on the relationship between principal's transformational leadership and the teacher effectiveness in primary schools of Taoyuan County.* Unpublished masters' dissertation, National Taipei University of Education, Taipei.

Zhang, Y. F. (2001). *A study on the relationship between principals' transformational leadership and school organisational climate in primary schools of Taipei City and County.* Unpublished masters' dissertation, National Taipei University of Education, Taipei.

Zhang, Z. R. (2001). *A study of the relationships among principals' transformational leadership, transactional leadership and the capacity for organisational learning in primary schools.* Unpublished masters' dissertation, National Taiwan Normal University, Taipei.

Zheng, C. F. (2004). Performance management and educational accountability. *Journal of Education Research*, 124, 5-21.

Zheng, Y. M. (2004). *A study of relationship between principals' instructional leadership and school effectiveness in primary schools of Miaoli County.* Unpublished masters' dissertation, National Taichung University of Education, Taichung.

Zhu, Z. Z. (2002). *A study of the relationships among principals' transformational leadership, transactional leadership and teachers' job satisfaction in primary schools.* Unpublished masters' dissertation, National TaiTung University, Tai-Tung.

Appendix A

Survey of Formulating a Practical Principal Performance Management System (the PPM system)

Dear Principal/policy maker,

Thank you for taking the time to complete this questionnaire. In Taiwan, school-based management policy has been developed out of concern to improve the accountability and performance of principals. The purpose of this study is to explore questions that arise in respect of how to construct a feasible PPM system which may serve as reference points for education policy making.

The first question concerns your current position, while the others focus on your view of PPM systems. Results will be analysed on an aggregate not individual basis and will be used only for the academic purpose of this study. They will only ever be reported anonymously. Research ethics and confidentiality will be strictly adhered to which, hopefully, will enable you feel free to answer all questions.

By sharing your expertise, I am confident that you will be playing a vital role in the success of this research. It would be most helpful if you could answer every question in the schedule, hopefully within one week and mail it back using the return envelope provided. I would like express my sincere appreciation for your help in completing this questionnaire.

1. Current post (Please put the appropriate number in the bracket)

() (1) Educational administrators; (2) Junior high school principals; (3) Primary school principals

2. Definition of the PPM system

PPM: Is meant to be a cyclical improvement process aimed at specific annual performance objectives agreed between advisers and principals through cooperation and communication over a period of time which can help principals to improve their professional capabilities and performance.

When answering questions:

- Most answers ask you to respond to a 4-point scale range from "1" (Strongly disagree) to "4" (Strongly agree) at the end of each item. Please ✓ in the box of your choice.
- There may be several items to most questions. Please respond to each appropriately.

| | 1: Strongly disagree; | 2: Disagree; | 3: Agree; | 4: Strongly agree |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| | 1 | 2 | 3 | 4 |
| 1. Principals feel role isolation due to lack of good mentors. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Principals need continuous professional help and support. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. It is necessary to establish a good PPM system to help principals improve school effectiveness. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. What purposes should be emphasised in the planning of a PPM system? | | | | |
| (1) Offer instant feedback | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) Help to improve shortcomings | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) Help with professional development | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (4) Decide principal annual performance | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (5) Provide references for principal selection | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (6) Decide principals' salary levels | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. What qualification and abilities should an ideal PPM adviser have? | | | | |
| (1) Experience of running schools | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) Professional knowledge about education | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) Strategy planning ability..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (4) Administrative management ability..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (5) Problem diagnosis ability..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (6) Data collecting and analysis ability..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (7) Communication and interpersonal skills | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (8) Human resource management skills | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (9) Counselling abilities and skills..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (10) Ability in developing action plans | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (11) Good personality characteristics | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (12) Others _____ (Please explain here) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Who are the most suitable advisers for principals in the PPM system? | | | | |
| (1) Inspectors of the Bureau of Education | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) Qualified advisers trained by the government | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) Other excellent principals | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (4) Scholars and experts from higher education institutions | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (5) Others _____ (Please explain here) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. PPM advisers should receive professional training to obtain certificates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Central government should establish a PPM adviser selection pool that can be used by local governments or schools. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Should PPM advisers be full-time or part-time? | | | | |
| <input type="checkbox"/> (1) full-time; | | | | |
| <input type="checkbox"/> (2) part-time; | | | | |
| <input type="checkbox"/> (3) Other forms _____ (Please explain here) | | | | |
| 10. Who should be responsible for the selection process of principals' advisers? | | | | |
| <input type="checkbox"/> (1) Education administrative authorities for schools; | | | | |
| <input type="checkbox"/> (2) Local Education Committees; | | | | |
| <input type="checkbox"/> (3) Local Government Principal Selection Committees; | | | | |
| <input type="checkbox"/> (4) Parents' Committees for Schools; | | | | |
| <input type="checkbox"/> (5) Others _____ (Please explain here) | | | | |
| 11. If PPM advisers are full-timers their salaries should be higher than those of principals. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

1: Strongly disagree; 2: Disagree; 3: Agree; 4: Strongly agree

| | 1 | 2 | 3 | 4 |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 12. If PPM advisers are part-timers their salary can be decided by how many cases they undertake. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. Who should be responsible for the salaries or payments of PPM advisers? | | | | |
| <input type="checkbox"/> (1) Ministry of Education; | | | | |
| <input type="checkbox"/> (2) Local government in charge of the schools; | | | | |
| <input type="checkbox"/> (3) Schools; | | | | |
| <input type="checkbox"/> (4) Others (Please explain here) | | | | |
| 14. The government should set up national principal professional standards for appraising principals' professional development and performance in a PPM system. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. What key areas of principal performance should be emphasised in a PPM system? | | | | |
| (1) Strategic planning | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) Administrative management | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) Curriculum and instructional leadership | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (4) Moral leadership | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (5) Professional disposition | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (6) Principal profession development | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (7) Public relationships... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (8) Financial management | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (9) Staff management | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (10) Achievement of principal's annual performance objectives..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (11) Pupil attainment..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (12) Parental satisfaction | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (13) Others (Please explain here) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. How should performance appraisal standards be decided when the purpose of the PPM is to help principals improve and achieve professional development? | | | | |
| (1) By adopting standardised appraisal standards that are applicable to all principals. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) By measuring individual principal annual improvement objectives as appraisal standards. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) By adopting both standardised and individual principal appraisal standards. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. How should performance appraisal standards be decided when the purpose of the PPM is to select and award principals? | | | | |
| (1) By adopting standardised appraisal standards that are applicable to all principals. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) By measuring individual principal annual improvement objectives as appraisal standards. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) By adopting both standardised and individual principal appraisal standards. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. PPM data collection methods and tools should be completely planned in advance. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. It is necessary to hold explanatory meetings for principals with a PPM instruction manual before implementation. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

1: Strongly disagree; 2: Disagree; 3: Agree; 4: Strongly agree

| | 1 | 2 | 3 | 4 |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 20. Principals should sign a performance agreement with their local education authority for their performance objectives over the four-year term. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 21. Principals should set annual performance objectives at the beginning of each academic year to guide their efforts. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 22. What should be the basis of setting principal performance objectives? | | | | |
| (1) Education policy objectives set by central government | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) Education policy objectives set by local government | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) Development objectives set by schools | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (4) The previous year's performance improvement objectives | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (5) Principals' professional development objectives | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (6) Others _____ (please explain here) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 23. How should principal performance objectives be decided? | | | | |
| (1) By principals after consulting colleagues | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) By advisers and principals after discussion | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) By report to local education authorities in charge for approval | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (4) Others _____ (please explain here) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 24. Among principal performance objectives there should be at least one item related to students' performance. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 25. Among principal performance objectives there should be at least one item related to principals' professional development. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 26. Among principal performance objectives there should be at least one item related to their annual improvement objectives. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 27. How many items of principal performance objectives are appropriate for each year? | | | | |
| <input type="checkbox"/> (1) 1-3 items; <input type="checkbox"/> (2) 3-5 items; <input type="checkbox"/> (3) 5-7 items; | | | | |
| <input type="checkbox"/> (4) decided after consulting with the adviser | | | | |
| 28. What should be the fundamental criteria for setting principles principal performance objectives? | | | | |
| (1) Specific | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) Measurable | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) Achievable | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (4) Relevant (related to school development objectives) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (5) Time-related (completed within a certain time period) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 29. Counselling processes between advisers and principals in a PPM system should emphasise continuous communication and feedback. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 30. How frequently should advisers and principals interact with each other during PPM counselling processes? | | | | |
| <input type="checkbox"/> (1) at least once a week; <input type="checkbox"/> (2) at least twice a month; | | | | |
| <input type="checkbox"/> (3) at least once a month; <input type="checkbox"/> (4) at least once every two months; | | | | |
| <input type="checkbox"/> (5) decided through consultation between both | | | | |
| 31. Attention should be paid to principals' reflective portfolios during PPM counselling processes. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 32. It is important to emphasise feedback from various stakeholders during PPM counselling processes. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

1: Strongly disagree; 2: Disagree; 3: Agree; 4: Strongly agree

| | 1 | 2 | 3 | 4 |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 33. What is the importance of feedback from the following sources on principal performance? | | | | |
| (1) Superiors..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) Staff. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) Students | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (4) Parents. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (5) Community | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (6) Principals of other schools | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (7) Other sources _____ (Please explain here) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 34. After each counselling session, advisers should provide an analysis report for principals for reference, to be kept in their personal portfolios. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 35. Before the end of each academic year, a performance appraisal should be conducted by advisers in light of annual performance objectives. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 36. How important is each of the following sources in conducting principals' annual performance appraisal by the adviser? | | | | |
| (1) Principal's self-appraisal | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) Principal's portfolio | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) Observation of principal behaviour | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (4) Individual interviews with stakeholders (staff, parents, line managers) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (5) Questionnaire survey | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (6) Others _____ (Please explain here)_ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 37. How important is the following data collection tools used by advisers in performance appraisals? | | | | |
| (1) Quantitative tools (checklists, rating scales, questionnaires, etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) Qualitative record (observation and interview records) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) Both | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 38. Advisers should hold a review meeting with principals within one week after appraisal being conducted. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 39. Advisers should complete and send the appraisal reports to principals within two weeks after review meetings. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 40. How appropriate is each of the following forms for presenting the appraisal reports? | | | | |
| (1) An overall grade or mark. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) Quantitative profiles of different performance dimensions. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) A document describing the strengths and weaknesses of principals in words and putting forward suggestions for improvement. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (4) Others _____ (please explain here) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 41. Principals should have the right to express personal comments in written form within two weeks after receiving the reports. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 42. If principals have complaints regarding to the appraisal reports they should have the right to appeal. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 43. Local education authorities should hold an Appeal Committees to review complaints from principals. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 44. PPM data should be properly managed and kept confidential. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

1: Strongly disagree; 2: Disagree; 3: Agree; 4: Strongly agree

| | 1 | 2 | 3 | 4 |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| 45. PPM data can only be viewed by those legally permitted. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 46. The PPM data should only be viewed by the following personnel: | | | | |
| (1) Principals who have been appraised | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) Principals' line managers | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) Principals' advisers | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (4) Members of Principal Selection Committees | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (5) Members of Appeals Committees | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (6) Other persons legally permitted | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (7) Others _____ (Please explain here) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 47. The shortcomings of principals' performances should be listed as priority objectives for the next academic year. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 48. A national principal college/centre for planning the professional development of principals should be established. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 49. A special network to assist professional development of principals and share leadership experiences should be established. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 50. A principal performance reward system should be established to encourage better performance by principals. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 51. Principal performance reward systems should: | | | | |
| (1) Adopt a performance related pay system. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) Increase the highest basic salary scale of principals. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (3) Increase academic research allowance ranking. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (4) Establish principal performance bonus systems. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (5) Increase principal annual rating bonuses. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (6) Others _____ (Please explain here) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 52. The main criteria of selecting/rewarding principals should be based on the extent to which they achieve annual performance objectives. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 53. Local education authorities should have an annual budget for the use of principal annual performance improvement. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

【 Thank you for completing this questionnaire 】

Appendix B

Response and Treatment of Expert Panel on Pilot Test

| Question | Adequate | | Adequacy if revised as opinions | | Inadequate | | Treatment | |
|----------|-----------|---------|---------------------------------|---------|------------|---------|-----------|-------------------------|
| | frequency | percent | frequency | percent | frequency | percent | retained | retained after revision |
| 1 | 12 | 80% | 3 | 20% | 0 | 0% | | ★ |
| 2 | 15 | 93.3% | 1 | 6.7% | 0 | 0% | | ★ |
| 3 | 15 | 93.3% | 1 | 6.7% | 0 | 0% | | ★ |
| 4 | 13 | 86.7% | 2 | 13.3% | 0 | 0% | | ★ |
| 5 | 11 | 73.3% | 4 | 26.7% | 0 | 0% | | ★ |
| 6 | 13 | 86.7% | 2 | 13.3% | 0 | 0% | | ★ |
| 7 | 13 | 86.7% | 2 | 13.3% | 0 | 0% | | ★ |
| 8 | 14 | 93.2% | 1 | 6.7% | 0 | 0% | | ★ |
| 9 | 15 | 100% | 0 | 0% | 0 | 0% | ★ | ★ |
| 10 | 15 | 93.3% | 0 | 6.7% | 0 | 0% | ★ | |
| 11 | 15 | 100% | 0 | 0% | 0 | 0% | ★ | |
| 12 | 14 | 93% | 1 | 6.7% | 0 | 0% | | ★ |
| 13 | 15 | 100% | 0 | 0% | 0 | 0% | ★ | |
| 14 | 13 | 86.7% | 2 | 13.3% | 0 | 0% | | ★ |
| 15 | 11 | 73.3% | 4 | 26.7% | 0 | 0% | | ★ |
| 16 | 11 | 73.3% | 4 | 26.7% | 0 | 0% | | ★ |
| 17 | 11 | 73.3% | 4 | 26.7% | 0 | 0% | | ★ |
| 18 | 14 | 93.2% | 1 | 13.3% | 0 | 0% | | ★ |
| 19 | 13 | 86.7% | 2 | 13.3% | 0 | 0% | | ★ |
| 20 | 13 | 86.7% | 2 | 13.3% | 0 | 0% | | ★ |
| 21 | 13 | 86.7% | 2 | 13.3% | 0 | 0% | | ★ |
| 22 | 11 | 73.3% | 4 | 26.7% | 0 | 0% | | ★ |
| 23 | 13 | 86.7% | 2 | 0% | 0 | 0% | | ★ |
| 24 | 15 | 100% | 0 | 0% | 0 | 0% | ★ | |
| 25 | 15 | 90% | 0 | 10% | 0 | 0% | ★ | |
| 26 | 15 | 100% | 0 | 0% | 0 | 0% | ★ | |
| 27 | 15 | 100% | 0 | 0% | 0 | 0% | ★ | |
| 28 | 15 | 100% | 0 | 0% | 0 | 0% | ★ | |
| 29 | 15 | 93.3% | 1 | 6.7% | 0 | 0% | | ★ |
| 30 | 15 | 100% | 0 | 0% | 0 | 0% | ★ | |
| 31 | 11 | 73.3% | 4 | 26.7% | 0 | 0% | | ★ |
| 32 | 14 | 93.2% | 1 | 6.7% | 0 | 0% | | ★ |
| 33 | 14 | 93.2% | 1 | 6.7% | 0 | 0% | | ★ |
| 34 | 11 | 73.3% | 4 | 26.7% | 0 | 0% | | ★ |
| 35 | 14 | 86.7.2% | 2 | 13.3% | 0 | 0% | | ★ |
| 36 | 14 | 80% | 3 | 20% | 0 | 0% | | ★ |
| 37 | 13 | 73.3% | 4 | 26.7% | 0 | 0% | | ★ |
| 38 | 14 | 93.2% | 1 | 6.7% | 0 | 0% | | ★ |
| 39 | 14 | 93.2% | 1 | 6.7% | 0 | 0% | | ★ |
| 40 | 13 | 86.7% | 2 | 13.3% | 0 | 0% | | ★ |
| 41 | 13 | 86.7% | 2 | 13.3% | 0 | 0% | | ★ |
| 42 | 15 | 93.3% | 1 | 6.7% | 0 | 0% | | ★ |
| 43 | 15 | 100% | 0 | 0% | 0 | 0% | ★ | |
| 44 | 14 | 93.2% | 1 | 6.7% | 0 | 0% | | ★ |
| 45 | 13 | 86.7% | 2 | 13.3% | 0 | 0% | | ★ |
| 46 | 14 | 86.7% | 2 | 13.3% | 0 | 0% | | ★ |
| 47 | 15 | 100% | 0 | 0% | 0 | 0% | ★ | |
| 48 | 13 | 86.7% | 2 | 13.3% | 0 | 0% | | ★ |
| 49 | 14 | 93.2% | 1 | 6.7% | 0 | 0% | | ★ |
| 50 | 14 | 93.2% | 1 | 6.7% | 0 | 0% | | ★ |
| 51 | 12 | 80% | 3 | 20% | 0 | 0% | | ★ |
| 52 | 13 | 86.7% | 2 | 13.3% | 0 | 0% | | ★ |
| 53 | 12 | 80% | 3 | 20% | 0 | 0% | | ★ |

Appendix C

Interview Guidelines for Principals and Administrators:

How to formulating a practical Principal Performance Management System (a PPM system)

A. Please fill in the following questions before the start of our interview.

- () 1. Current post: (1) Educational administrator; (2) Junior high school principal; (3) Primary school principal;
- () 2. Gender: (1) Male; (2) Female;
- () 3. Age: _____ years old;
- () 4. Years of principal/educational administrator: _____ years;
- () 5. Years of participating principal appraisal/school evaluation: _____ years;
- () 6. Highest education level: (1) Bachelor; (2) Master; (4) PhD student; (5) Doctor;
- () 7. School size: _____ classes; _____ students (**Only for principals**)

B. Interview Questions

Q1. Do you think that principals may experience role isolation due to lack in good mentors/helpful friends? Why?

Q2. Do you think that principals need continuous professional support? Why?

Q3. Do you think that current principal appraisal in primary and secondary schools of Taiwan can provide continuous professional support? What are the main problems in doing so? How can improvements be made? Why?

Q4. Do you think it necessary to establish a complete set of PPM procedures to replace current principal appraisal? Why?

Q5. What are your views as to the following aspects of forming a good PPM system?

5.1 What should be the main purpose of PPM? Why?

5.2 How long should the PPM cycles last? Why?

5.3 How should the advisers be recruited, trained, appointed and managed?

Why?

5.4 Is it necessary to establish principal professional standards in Taiwan? Why?

5.5 What should be the important key performance areas for principals? Why?

5.6 How should appraisal standards of principal performance be set? Why?

5.7 How should data collection methods and tools of principal performance be prepared? Why?

5.8 What ancillary measures or preparatory work should take place before implementing a PPM system? Why?

Q6. What are your views concerning the following aspects of PPM operating processes?

6.1 How should annual performance objectives be set? Why?

6.2 Is it necessary for principals to sign performance agreements for their four-year terms with local education authorities? Why?

6.3 How should PPM counselling function be increased or improved? Why?

6.4 How should principal performance be appraised? Why?

6.5 How should review meeting be hold? Why?

6.6 How should appraisal reports be made and dealt with? Why?

6.7 How should confidentiality and due process be treated in PPM systems? Why?

Q7. What are your views concerning the following aspects of dealing with performance outcomes in PPM?

7.1 How should shortcomings of principal performance be handled? Why?

7.2 How should the professional development of principals be planned and established? Why?

7.3 How should principal reward ways be planned? Why?

7.4 How should performance outcomes be utilised in principal selection? Why?

7.5 How should resources be provided for helping principals improve their performance? Why?

Q8. Do you have any other suggestions on the constructing a PPM systems?

- Thank you for participating in this interview -

Appendix D

Statement of Agreement for Interview

Dear Principal/policy maker,

Thank you for taking the time to participate in the interview. By sharing your expertise you will be playing a vital role in the success of what I hope will prove to be important research for all of us.

The purpose of this study is to explore some questions with respect to how to formulate a feasible principal performance management (PPM) system for school principals which will also serve as reference for educational policy making. There is no right or wrong answer to each question and your replies will only be used for academic purposes. Please be assured that you will have complete anonymity during the study and that your name will never appear in any reports. Ethical research requirements will be strictly observed, including personal confidentiality and you will be fully protected as part of my personal responsibility as researcher. I hope that this will enable you to feel free to provide your opinions or make recommendations regarding each question. If you have any enquire, or even if you do not want to answer any question during the process of interview, please let me know.

The whole interview will be audio-recorded so that your responses can be analysed as fully and accurately as possible. If you disagree with audio-recording of your interview or wish to discontinue it, once started, please do not hesitate to let me know at any time.

Finally, I would like to say thank you again, most sincerely, for your help in completing this interview.

I have fully understood the purpose of this research and the way that interviews will be conducted. I consent to participation in it and the recording of my interview. I understand that my responses and the data obtained will be utilised only for academic purposes and that personal confidentiality will be completely protected. I agree to provide my personal opinions or suggestions autonomously and genuinely to each question.

Signature of interviewee: _____

Date: _____

Appendix E

Data Analysis Results I : Mean, SD, T-test and One-way ANOVA of Item Responses

Mean, SD, T-test, and One-way ANOVA of item responses

| | N | Mean | SD | T-test (>2.5<) | T-test (>3.0) | Sort | F- value | Post hoc test |
|---|-----|------|------|-------------------|------------------|------|-----------|---------------------|
| Q1. Principals feel role isolation due to lack of good mentors. | 386 | 2.35 | 0.74 | -3.91*** | | | | |
| Q2. Principals need continuous professional help and support. | 388 | 3.52 | 0.51 | 39.17*** | 19.88*** | | | |
| Q3. It is necessary to establish a good PPM system to help principals improve school effectiveness. | 380 | 3.46 | 0.53 | 35.34*** | 16.94*** | | | |
| Q4. What purposes should be emphasised in the planning of a PPM system? | | | | | | | | |
| Q4.3.Help with professional development | 377 | 3.59 | 0.51 | 41.57*** | 22.48*** | 1 | 183.81*** | 3>2,1,4,5,6 |
| Q4.2 Help to improve shortcomings. | 376 | 3.53 | 0.51 | 39.33*** | 20.32*** | 2 | | 2>1,4,5,6 |
| Q4.1 Offer instant feedback. | 378 | 3.42 | 0.54 | 33.05*** | 15.05*** | 3 | | 1>4,5,6 |
| Q4.4 Decide principal annual performance. | 375 | 3.20 | 0.56 | 24.13*** | 6.90*** | 4 | | 4>5,6 |
| Q4.5 Provide references for principal selection. | 371 | 3.04 | 0.61 | 17.05*** | 1.35 | 5 | | 5>6 |
| Q4.6 Decide principals' salary levels. | 366 | 2.64 | 0.81 | 3.37*** | | 6 | | |
| Q5. What qualification and abilities should an ideal PPM adviser have? | | | | | | | | |
| Q5.11 Good personality characteristics | 388 | 3.69 | 0.47 | 49.72*** | 28.89*** | 1 | 27.50*** | 11>4,2,3,9,8,6,10,1 |
| Q5.7 Communication and interpersonal skills. | 388 | 3.66 | 0.48 | 47.47*** | 27.09*** | 2 | | 7>3,9,8,6,10,1 |
| Q5.5 Problem diagnosis ability | 389 | 3.65 | 0.49 | 46.16*** | 26.14*** | 3 | | 5>3,9,8,6,10,1 |
| Q5.4 Administrative management ability | 388 | 3.64 | 0.50 | 45.34*** | 25.49*** | 4 | | 4>3,9,8,6,10,1 |
| Q5.2 Professional knowledge about education. | 390 | 3.62 | 0.51 | 43.83*** | 24.32*** | 5 | | 2>3,9,8,6,10,1 |
| Q5.3 Strategy planning ability | 388 | 3.60 | 0.50 | 43.59*** | 23.74*** | 6 | | 3>9,8,6,10,1 |
| Q5.9 Counselling abilities and skills | 386 | 3.51 | 0.53 | 37.55*** | 18.87*** | 7 | | 9>1 |
| Q5.8 Human resource management skills. | 387 | 3.48 | 0.53 | 36.80*** | 18.08*** | 8 | | |
| Q5.6 Data collecting and analysis ability | 388 | 3.47 | 0.54 | 35.55*** | 17.31*** | 9 | | |
| Q5.10 Ability in developing action plans | 388 | 3.47 | 0.53 | 36.20*** | 17.62*** | 10 | | |
| Q5.1 Experience of running schools. | 388 | 3.43 | 0.59 | 31.18*** | 14.38*** | 11 | | |

*** P< .0001

If T-test (>2.5<) is significant it means that the respondents slightly agreed/disagree with the question while the t-value was set on 2.5.

If T-test (>3.0) is significant it means that the respondents generally agreed with the question while the t-value was set on 3.0.

F-value is the result of General Linear Model-repeated Measures used to test the difference between selection items of the question.

On the column of Post hoc test, Y>X means that the average of respondents on Y item is significantly higher than the X item (s).

Mean, SD, T-test, and One-way ANOVA of item responses (continued)

| | N | Mean | SD | T-test (>2.5<) | T-test (>3.0) | Sort | F- value | Post hoc test |
|--|-----|------|------|-------------------|------------------|------|----------|---------------|
| Q6. Who are most suitable as advisers of principals during PPM? | | | | | | | | |
| Q6.3 Other excellent principals. | 363 | 3.27 | 0.72 | 20.33*** | 7.08*** | 1 | 11.30*** | 3>2,1,4 |
| Q6.2 Qualified advisers trained | 359 | 3.13 | 0.69 | 17.20*** | 3.57*** | 2 | | 2>4 |
| Q6.1 Inspectors of the Bureau of Education | 365 | 3.09 | 0.67 | 16.94*** | 2.66*** | 3 | | 1>4 |
| Q6.4 Scholars and experts from higher education institutions | 355 | 2.98 | 0.70 | 12.84*** | | 4 | | |
| Q7 PPM advisers should receive professional training to obtain certificates. | 386 | 3.49 | 0.63 | 30.70*** | 15.19*** | | | |
| Q8. Central government should establish a PPM adviser selection pool that can be used by local governments or schools. | 378 | 3.32 | 0.72 | 22.21*** | 8.67*** | | | |
| Q9. Should PPM advisers be full-time or part-time? (1) full-time (52.7%); (2) part-time (42.6%); (3) Other forms (4.7%) | | | | | | | | |
| Q10. Who should be responsible for the selection process of principals' advisers? (1) Education administrative authorities for schools (62.3%); (2) Local Education Committees (20.6%); (3) Local Government Principal Selection Committees (12.5%); (4) Parents' Committees for Schools (0.9%); (5) Other forms (3.8%) | | | | | | | | |
| Q11. If PPM advisers are full-timers their salaries should be higher than those of principals. | 382 | 2.73 | 0.81 | 5.48*** | | | | |
| Q12. If PPM advisers are part-timers their salary can be decided by how many cases they undertake. | 385 | 3.06 | 0.53 | 20.76*** | 2.30* | | | |
| Q13. Who should be responsible for the salaries or payments of PPM advisers? (1) Ministry of Education (50.1%); (2) Local government in charge of the schools (48.3%); (3) Schools (0.9%); (4) Other forms (3.8%) | | | | | | | | |
| Q14. The government should set up national principal professional standards for appraising principals' professional development and performance in a PPM system. | 367 | 3.41 | 0.67 | 26.02*** | 11.74*** | | | |

Mean, SD, T-test, and One-way ANOVA of item responses (continued)

| | N | Mean | SD | T-test (>2.5<) | T-test (>3.0) | Sort | F- value | Post hoc test |
|--|-----|------|------|-------------------|------------------|------|----------|----------------------|
| Q15. What key areas of principal performance should be emphasised in a PPM system? | | | | | | | | |
| Q15.2 Administrative management. | 374 | 3.50 | 0.51 | 37.83*** | 18.91*** | 1 | 25.94*** | 2>9,5,4,10,11,12,7,8 |
| Q15.1 Strategic planning. | 373 | 3.47 | 0.52 | 35.85*** | 17.30*** | 2 | | 1>5,4,10,11,12,7,8 |
| Q15.6 Principal profession development. | 372 | 3.47 | 0.56 | 33.50*** | 16.14*** | 2 | | 6>5,4,10,11,12,7,8 |
| Q15.3 Curriculum and instructional leadership. | 373 | 3.46 | 0.54 | 34.66*** | 16.63*** | 4 | | 3>5,4,10,11,12,7,8 |
| Q15.9 Staff management. | 373 | 3.43 | 0.52 | 34.64*** | 15.94*** | 5 | | 9>10,11,12,7,8 |
| Q15.5 Professional disposition. | 373 | 3.40 | 0.53 | 32.94*** | 14.63*** | 6 | | 5>11,12,7,8 |
| Q15.4 Moral leadership. | 371 | 3.39 | 0.52 | 32.83*** | 14.29*** | 7 | | 4>10,11,12,7,8 |
| Q15.10 Achievement of principal's annual performance objectives. | 371 | 3.36 | 0.53 | 31.40*** | 13.23*** | 8 | | 10>12,7,8 |
| Q15.11 Pupil attainment. | 370 | 3.31 | 0.58 | 26.67*** | 10.11*** | 9 | | 11>7,8 |
| Q15.12 Parental satisfaction. | 370 | 3.25 | 0.54 | 26.76*** | 8.95*** | 10 | | 12>8 |
| Q15.7 Public relationships. | 371 | 3.23 | 0.58 | 24.07*** | 7.50*** | 11 | | |
| Q15.8 Financial management. | 371 | 3.18 | 0.53 | 24.84*** | 6.52*** | 12 | | |
| Q16. How should performance appraisal standards be decided when the purpose of the PPM is to help principals improve and achieve professional development? | | | | | | | | |
| Q16.3 By adopting both standardised and individual principal appraisal standards. | 353 | 3.38 | 0.59 | 27.88*** | 11.98*** | 1 | 51.14*** | 3>2,1 |
| Q16.2 By measuring individual principal annual improvement objectives as the appraisal standards. | 364 | 3.30 | 0.55 | 27.66*** | 10.36*** | 2 | | 2>1 |
| Q16.1 By adopting standardised appraisal standards that are applicable to all principals. | 365 | 3.01 | 0.71 | 13.84*** | 0.37 | 3 | | |
| Q17. How should performance appraisal standards be decided when the purpose of the PPM is to select and award principals? | | | | | | | | |
| Q17.3 By adopting both standardised and individual principal appraisal standards. | 351 | 3.30 | 0.61 | 24.66*** | 9.28*** | 1 | 22.51*** | 3>1 |
| Q17.2 By measuring individual principal annual improvement objectives as the appraisal standards. | 352 | 3.25 | 0.56 | 25.10*** | 8.30*** | 2 | | 2>1 |
| Q17.1 By adopting standardised appraisal standards that are applicable to all principals. | 355 | 3.05 | 0.71 | 14.63*** | 1.41 | 3 | | |
| Q18. PPM data collection methods and tools should be completely planned in advance. | 385 | 3.64 | 0.50 | 44.67*** | 25.11*** | | | |
| Q19 It is necessary to hold explanatory meetings for principals with a PPM instruction manual before implementation. | 385 | 3.59 | 0.54 | 39.74*** | 21.50*** | | | |

Mean, SD, T-test, and One-way ANOVA of item responses (continued)

| | N | Mean | SD | T-test (>2.5<) | T-test (>3.0) | Sort | F- value | Post hoc test |
|---|-----|------|------|-------------------|------------------|------|----------|---------------|
| Q20 Principals should sign a performance agreement with their local education authority for their performance objectives over the four-year term. | 386 | 2.85 | 0.81 | 8.46*** | | | | |
| Q21. Principals should set annual performance objectives at the beginning of each academic year to guide their efforts. | 385 | 3.26 | 0.57 | 26.02*** | 8.90*** | | | |
| Q22. What should be the basis of setting principal performance objectives? | | | | | | | | |
| Q22.3 Development objectives set by schools. | 379 | 3.56 | 0.50 | 40.92*** | 21.56*** | 1 | 38.63*** | 3>4,2,5,1 |
| Q22.4 The previous year's performance improvement objectives. | 375 | 3.40 | 0.50 | 35.21*** | 15.70*** | 2 | | 4>5,1 |
| Q22.2 Education policy objectives set by local government. | 377 | 3.38 | 0.53 | 32.29*** | 13.87*** | 3 | | 2>5,1 |
| Q22.5 Principals' professional development objectives | 375 | 3.32 | 0.51 | 31.13*** | 12.21*** | 4 | | 5>1 |
| Q22.1 Education policy objectives set by central government. | 377 | 3.23 | 0.52 | 27.15*** | 8.64*** | 5 | | |
| Q23. How should principal performance objectives be decided? | | | | | | | | |
| Q23.2 By advisers and principals after discussion. | 379 | 3.26 | 0.58 | 25.35*** | 8.70*** | 1 | 8.37*** | 2>3 |
| Q23.1 By principals after consulting colleagues. | 376 | 3.20 | 0.69 | 19.84*** | 5.71*** | 2 | | 1>3 |
| Q23.3 By report to local education authorities in charge for approval. | 375 | 3.10 | 0.59 | 19.71*** | 3.25*** | 3 | | |
| Q24. Among principal performance objectives there should be at least one item related to students' performance. | 384 | 3.52 | 0.53 | 37.95*** | 19.32*** | | | |
| Q25. Among principal performance objectives there should be at least one item related to principals' professional development. | 383 | 3.47 | 0.54 | 35.56*** | 17.28*** | | | |
| Q26. Among principal performance objectives there should be at least one item related to their annual improvement objectives. | 383 | 3.47 | 0.52 | 36.57*** | 17.77*** | | | |
| Q27. How many items of principal performance objectives are appropriate for each year? | | | | | | | | |
| (1) 1-3 items (13.9%); | | | | | | | | |
| (2) 3-5 items (30.3%); | | | | | | | | |
| (3) 5-7 items (14.1%); | | | | | | | | |
| (4) decided after consulting with the adviser (39.5%). | | | | | | | | |
| Q28. What should be the fundamental criteria for setting principles principal performance objectives? | | | | | | | | |
| Q28.1 Specific | 386 | 3.61 | 0.55 | 39.23*** | 21.50*** | 1 | 34.92*** | 1>4,2,5 |
| Q28.3 Achievable | 386 | 3.57 | 0.52 | 40.45*** | 21.59*** | 2 | | 3>4,2,5 |
| Q28.4 Relevant (related to school development objectives). | 384 | 3.47 | 0.53 | 35.73*** | 17.24*** | 3 | | 4>2,5 |
| Q28.2 Measurable | 378 | 3.38 | 0.60 | 28.34*** | 12.21*** | 4 | | |
| Q28.5 Time-related (completed within a certain time period). | 376 | 3.37 | 0.56 | 30.17*** | 12.88*** | 5 | | |

Mean, SD, T-test, and One-way ANOVA of item responses (continued)

| | N | Mean | SD | T-test (>2.5<) | T-test (>3.0) | Sort | F- value | Post hoc test |
|---|-----|------|------|-------------------|------------------|------|-----------|---------------|
| Q29. Counselling processes between advisers and principals in a PPM system should emphasise continuous communication and feedback. | 373 | 3.55 | 0.55 | 36.56*** | 19.15*** | | | |
| Q30. How frequently should advisers and principals interact with each other during PPM counselling processes? (1)at least once a week (2.14%); (2)at least twice a month (17.91%); (3)at least once a month (42.78%); (4)at least once every two months (11.50%); (5)decided through consultation between both (25.67%). | | | | | | | | |
| Q31. Attention should be paid to principals' reflective portfolios during the PPM counselling processes. | 387 | 3.33 | 0.64 | 25.74*** | 10.25*** | | | |
| Q32. It is important to emphasise the feedback from various stakeholders during PPM counselling processes. | 381 | 3.42 | 0.52 | 34.45*** | 15.67*** | | | |
| Q33. What is the importance of feedback from the following sources on principal performance? | | | | | | | | |
| Q33.2 Staff | 369 | 3.53 | 0.51 | 38.58*** | 19.77*** | 1 | 79.170*** | 2>3,4,5,1,6 |
| Q33.3 Students | 367 | 3.46 | 0.54 | 33.84*** | 16.12*** | 2 | | 3>5,1,6 |
| Q33.4 Parents | 366 | 3.45 | 0.52 | 34.83*** | 16.41*** | 3 | | 4>5,1,6 |
| Q33.1 Superiors | 367 | 3.27 | 0.53 | 27.93*** | 9.85*** | 4 | | 1>6 |
| Q33.5 Community | 364 | 3.27 | 0.52 | 28.37*** | 10.06*** | 4 | | 5>6 |
| Q33.6 Principals of other schools. | 362 | 3.03 | 0.60 | 16.62*** | 0.87 | 6 | | |
| Q34. After each counselling session, the advisor should provide an analysis report for principals for reference to be kept in their personal portfolios. | 391 | 3.33 | 0.54 | 30.61*** | 12.23*** | | | |
| Q35. Before the end of each academic year, a performance appraisal should be conducted by advisers in light of annual performance objectives. | 389 | 3.28 | 0.55 | 27.85*** | 10.00*** | | | |
| Q36. How important is each of the following sources in conducting principals' annual performance appraisal by the adviser? | | | | | | | | |
| Q36.3 Observation of principal behaviour. | 379 | 3.40 | 0.55 | 31.80*** | 14.15*** | 1 | 10.20*** | 3>4,1,2,5 |
| Q36.4 Individual interviews with stakeholders (staff, parents, line managers) | 379 | 3.32 | 0.60 | 26.75*** | 10.42*** | 2 | | 4>2,5 |
| Q36.1 Principal's self-appraisal. | 378 | 3.32 | 0.54 | 29.48*** | 11.51*** | 2 | | 1>2,5 |
| Q36.2 Principal's portfolio. | 380 | 3.26 | 0.55 | 26.82*** | 9.06*** | 4 | | |
| Q36.5 Questionnaire survey (staff, parents, and line managers). | 375 | 3.23 | 0.60 | 23.53*** | 7.34*** | 5 | | |

Mean, SD, T-test, and One-way ANOVA of item responses (continued)

| | N | Mean | SD | T-test (>2.5<) | T-test (>3.0) | Sort | F- value | Post hoc test |
|--|-----|------|------|-------------------|------------------|------|----------|---------------|
| Q37. How important is the following data collection tools used by advisers in performance appraisals? | | | | | | | | |
| Q37.3 Both | 367 | 3.49 | 0.59 | 31.95*** | 15.60*** | 1 | 32.45*** | 3>2,1 |
| Q37.2 Qualitative record (observation or interview records) | 373 | 3.41 | 0.56 | 30.85*** | 13.65*** | 2 | | 2>1 |
| Q37.1 Quantitative tools (checklists, rating scales, or questionnaires) | 370 | 3.26 | 0.57 | 25.34*** | 8.42*** | 3 | | |
| Q38. Advisers should hold a review meeting with principals within one week after appraisal being conducted. | 381 | 3.38 | 0.55 | 31.20*** | 13.53*** | | | |
| Q39. Advisers should complete and send the appraisal reports to principals within two weeks after review meetings. | 383 | 3.36 | 0.54 | 31.34*** | 13.12*** | | | |
| Q40. How appropriate is each of the following forms for presenting the appraisal reports? | | | | | | | | |
| Q40.3 A document describing the strengths and weaknesses of principals in words and putting forward suggestions for improvement. | 377 | 3.49 | 0.56 | 34.22*** | 16.90*** | 1 | 91.30*** | 3>2,1 |
| Q40.2 Quantitative profiles of different performance dimensions. | 375 | 3.29 | 0.53 | 28.50*** | 10.36*** | 2 | | 2>1 |
| Q40.1 An overall grade or mark. | 372 | 3.04 | 0.65 | 16.15*** | 1.21 | 3 | | |
| Q41. Principals should have the right to express personal comments in written form within two weeks after receiving the reports. | 383 | 3.43 | 0.54 | 33.81*** | 15.55*** | | | |
| Q42. If principals have complaints regarding to the appraisal reports they should have the right to appeal. | 386 | 3.45 | 0.54 | 34.70*** | 16.45*** | | | |
| Q43 Local education authorities should hold an Appeal Committees to review complaints from principals. | 387 | 3.37 | 0.58 | 29.57*** | 12.67*** | | | |
| Q44. PPM data should be properly managed and kept confidential. | 386 | 3.59 | 0.52 | 41.23*** | 22.28*** | | | |
| Q45. PPM data can only be viewed by those legally permitted. | 387 | 3.56 | 0.54 | 38.51*** | 20.36*** | | | |
| Q46. The PPM data should only be viewed by the following personnel: | | | | | | | | |
| Q46.1 Principals who have been appraised. | 386 | 3.56 | 0.60 | 34.58*** | 18.34*** | 1 | 50.18*** | 1>3,5,4,6 |
| Q46.2 Principals' line managers. | 386 | 3.51 | 0.55 | 36.50*** | 18.49*** | 2 | | 2>5,4,6 |
| Q46.3 Principals' advisers. | 382 | 3.49 | 0.57 | 34.15*** | 16.99*** | 3 | | 3>5,4,6 |
| Q46.4 Members of Principal Selection Committees. | 378 | 3.21 | 0.64 | 21.75*** | 6.53*** | 5 | | |
| Q46.5 Members of Appeals Committees. | 376 | 3.30 | 0.61 | 25.31*** | 9.50*** | 4 | | 5>4,6 |
| Q46.6 Other persons legally permitted. | 380 | 3.20 | 0.65 | 20.95*** | 5.99*** | 6 | | |
| Q47. The shortcomings of principals' performances should be listed as the priority objectives for the next academic year | 387 | 3.44 | 0.53 | 35.12*** | 16.48*** | | | |
| Q48. A national principal college/centre for planning the professional development of principals should be established. | 391 | 3.32 | 0.67 | 24.28*** | 9.42*** | | | |

Mean, SD, T-test, and One-way ANOVA of item responses (continued)

| | N | Mean | SD | T-test (>2.5<) | T-test (>3.0) | Sort | F- value | Post hoc test |
|---|-----|------|------|-------------------|------------------|------|----------|---------------|
| Q49. A special network to assist professional development of principals and share leadership experiences should be established. | 390 | 3.46 | 0.54 | 35.02*** | 16.86*** | | | |
| Q50. A principal performance reward system should be established to encourage better performance by principals. | 386 | 3.38 | 0.67 | 25.91*** | 11.16*** | | | |
| Q51. Principal performance reward systems should: | | | | | | | | |
| Q51.4 Establish principal performance bonus systems. | 368 | 3.41 | 0.64 | 27.22*** | 12.27*** | 1 | 47.10*** | 4>5,3,2,1 |
| Q51.5 Increase principal annual rating bonuses. | 364 | 3.23 | 0.63 | 22.29*** | 7.09*** | 2 | | 5>3,2,1 |
| Q51.3 Increase academic research allowance ranking. | 360 | 3.15 | 0.71 | 17.38*** | 3.95*** | 3 | | 3>2,1 |
| Q51.2 Increase the highest basic salary scale of principals. | 360 | 3.01 | 0.74 | 13.09*** | 0.21 | 4 | | 2>1 |
| Q51.1 Adopt a performance related pay system. | 363 | 2.92 | 0.75 | 10.55*** | | 5 | | |
| Q52. The main criteria of selecting/rewarding principals should be based on the extent to which they achieve annual performance objectives. | 389 | 3.38 | 0.56 | 31.27*** | 13.51*** | | | |
| Q53. Local education authorities should have an annual budget for the use of principal annual performance improvement. | 387 | 3.42 | 0.63 | 28.78*** | 13.11*** | | | |

*** P< .0001

If T-test (>2.5<) is significant it means that the respondents slightly agreed/disagree with the question while the t-value was set on 2.5.

If T-test (>3.0) is significant it means that the respondents generally agreed with the question while the t-value was set on 3.0.

F-value is the result of General Linear Model-repeated Measures used to test the difference between selection items of the question.

On the column of Post hoc test, Y>X means that the average of respondents on Y item is significantly higher than the X item (s).

Appendix F

Data Analysis Results II : One-way ANOVA and Chi-square Test Comparison of responses among different current posts

Data analysis results: One-way ANOVA (except to Q9, Q10, Q13, Q27, Q30)

| Items | Post | N | Mean | SD | F value | Scheffé |
|-------|---------|-----|------|------|----------|------------|
| Q1 | 1 EdA | 112 | 2.35 | 0.73 | 1.25 | p>.05 |
| | 2 JHSP | 69 | 2.23 | 0.71 | | |
| | 3 PriSP | 205 | 2.40 | 0.76 | | |
| Q2 | 1 EdA | 113 | 3.49 | 0.52 | 1.14 | p>.05 |
| | 2 JHSP | 70 | 3.46 | 0.53 | | |
| | 3 PriSP | 205 | 3.55 | 0.50 | | |
| Q3 | 1 EdA | 109 | 3.55 | 0.55 | 2.22 | p>.05 |
| | 2 JHSP | 69 | 3.42 | 0.53 | | |
| | 3 PriSP | 202 | 3.43 | 0.52 | | |
| Q4.1 | 1 EdA | 107 | 3.37 | 0.59 | 0.63 | n.s. |
| | 2 JHSP | 69 | 3.46 | 0.53 | | |
| | 3 PriSP | 202 | 3.43 | 0.52 | | |
| Q4.2 | 1 EdA | 107 | 3.56 | 0.52 | 0.50 | n.s. |
| | 2 JHSP | 69 | 3.57 | 0.50 | | |
| | 3 PriSP | 200 | 3.51 | 0.51 | | |
| Q4.3 | 1 EdA | 107 | 3.51 | 0.54 | 2.14 | n.s. |
| | 2 JHSP | 69 | 3.57 | 0.50 | | |
| | 3 PriSP | 201 | 3.64 | 0.49 | | |
| Q4.4 | 1 EdA | 106 | 3.33 | 0.51 | 4.08* | 1>3 |
| | 2 JHSP | 69 | 3.13 | 0.57 | | |
| | 3 PriSP | 200 | 3.16 | 0.58 | | |
| Q4.5 | 1 EdA | 105 | 3.19 | 0.52 | 6.03** | 1>2 |
| | 2 JHSP | 69 | 2.87 | 0.71 | | |
| | 3 PriSP | 197 | 3.03 | 0.61 | | |
| Q4.6 | 1 EdA | 102 | 2.74 | 0.73 | 1.72 | n.s. |
| | 2 JHSP | 69 | 2.71 | 0.79 | | |
| | 3 PriSP | 195 | 2.57 | 0.85 | | |
| Q5.1 | 1 EdA | 112 | 3.20 | 0.60 | 13.54*** | 2>1 3>1 |
| | 2 JHSP | 71 | 3.46 | 0.53 | | |
| | 3 PriSP | 205 | 3.54 | 0.56 | | |
| Q5.2 | 1 EdA | 113 | 3.51 | 0.52 | 4.02* | 3>1 |
| | 2 JHSP | 71 | 3.63 | 0.49 | | |
| | 3 PriSP | 206 | 3.68 | 0.50 | | |
| Q5.3 | 1 EdA | 112 | 3.59 | 0.49 | 0.30 | n.s. |
| | 2 JHSP | 71 | 3.56 | 0.50 | | |
| | 3 PriSP | 205 | 3.61 | 0.50 | | |
| Q5.4 | 1 EdA | 112 | 3.58 | 0.50 | 1.21 | n.s. |
| | 2 JHSP | 70 | 3.67 | 0.47 | | |
| | 3 PriSP | 206 | 3.67 | 0.50 | | |
| Q5.5 | 1 EdA | 113 | 3.62 | 0.51 | 1.48 | n.s. |
| | 2 JHSP | 71 | 3.59 | 0.52 | | |
| | 3 PriSP | 205 | 3.69 | 0.47 | | |
| Q5.6 | 1 EdA | 112 | 3.37 | 0.52 | 3.68* | 3>1 |
| | 2 JHSP | 71 | 3.46 | 0.50 | | |
| | 3 PriSP | 205 | 3.54 | 0.56 | | |
| Q5.7 | 1 EdA | 111 | 3.62 | 0.49 | 1.11 | n.s. |
| | 2 JHSP | 71 | 3.63 | 0.49 | | |
| | 3 PriSP | 206 | 3.70 | 0.48 | | |

n.s.: no significance; *P<.05 **<.01 ***P<.001

Data analysis results: One-way ANOVA (continuous)

| Items | | Post | N | Mean | SD | F value | Scheffé |
|-------|---|-------|-----|------|------|----------|----------------|
| Q5.8 | 1 | EdA | 111 | 3.44 | 0.52 | 1.19 | n.s. |
| | 2 | JHSP | 71 | 3.44 | 0.53 | | |
| | 3 | PriSP | 205 | 3.52 | 0.53 | | |
| Q5.9 | 1 | EdA | 111 | 3.44 | 0.53 | 1.91 | n.s. |
| | 2 | JHSP | 71 | 3.46 | 0.50 | | |
| | 3 | PriSP | 204 | 3.55 | 0.53 | | |
| Q5.10 | 1 | EdA | 112 | 3.48 | 0.54 | 1.02 | n.s. |
| | 2 | JHSP | 71 | 3.39 | 0.52 | | |
| | 3 | PriSP | 205 | 3.50 | 0.53 | | |
| Q5.11 | 1 | EdA | 113 | 3.60 | 0.49 | 3.08* | n.s. |
| | 2 | JHSP | 70 | 3.71 | 0.46 | | |
| | 3 | PriSP | 205 | 3.74 | 0.46 | | |
| Q6.1 | 1 | EdA | 104 | 3.32 | 0.64 | 10.17*** | 1 > 2,3 |
| | 2 | JHSP | 68 | 2.88 | 0.64 | | |
| | 3 | PriSP | 193 | 3.05 | 0.66 | | |
| Q6.2 | 1 | EdA | 100 | 2.97 | 0.77 | 3.77* | 3 > 1 |
| | 2 | JHSP | 67 | 3.19 | 0.56 | | |
| | 3 | PriSP | 192 | 3.19 | 0.69 | | |
| Q6.3 | 1 | EdA | 101 | 3.07 | 0.78 | 5.58** | 3 > 1 |
| | 2 | JHSP | 66 | 3.30 | 0.72 | | |
| | 3 | PriSP | 196 | 3.36 | 0.67 | | |
| Q6.4 | 1 | EdA | 101 | 3.04 | 0.75 | 0.55 | n.s. |
| | 2 | JHSP | 65 | 2.95 | 0.65 | | |
| | 3 | PriSP | 189 | 2.95 | 0.69 | | |
| Q7 | 1 | EdA | 111 | 3.31 | 0.68 | 6.72** | 2 > 1 3 > 1 |
| | 2 | JHSP | 71 | 3.56 | 0.53 | | |
| | 3 | PriSP | 204 | 3.56 | 0.62 | | |
| Q8 | 1 | EdA | 107 | 3.16 | 0.78 | 3.84* | 3 > 1 |
| | 2 | JHSP | 70 | 3.37 | 0.59 | | |
| | 3 | PriSP | 201 | 3.39 | 0.71 | | |
| Q11 | 1 | EdA | 109 | 2.69 | 0.84 | 0.36 | n.s. |
| | 2 | JHSP | 72 | 2.69 | 0.80 | | |
| | 3 | PriSP | 201 | 2.76 | 0.81 | | |
| Q12 | 1 | EdA | 109 | 3.02 | 0.64 | 0.69 | n.s. |
| | 2 | JHSP | 72 | 3.11 | 0.52 | | |
| | 3 | PriSP | 204 | 3.07 | 0.47 | | |
| Q14 | 1 | EdA | 105 | 3.48 | 0.64 | 0.79 | p > .05 |
| | 2 | JHSP | 67 | 3.42 | 0.70 | | |
| | 3 | PriSP | 195 | 3.37 | 0.68 | | |
| Q15.1 | 1 | EdA | 105 | 3.51 | 0.54 | 0.87 | p > .05 |
| | 2 | JHSP | 70 | 3.49 | 0.53 | | |
| | 3 | PriSP | 198 | 3.43 | 0.51 | | |
| Q15.2 | 1 | EdA | 105 | 3.50 | 0.54 | 0.01 | p > .05 |
| | 2 | JHSP | 70 | 3.50 | 0.50 | | |
| | 3 | PriSP | 199 | 3.50 | 0.50 | | |
| Q15.3 | 1 | EdA | 105 | 3.40 | 0.58 | 1.79 | p > .05 |
| | 2 | JHSP | 70 | 3.41 | 0.52 | | |
| | 3 | PriSP | 198 | 3.51 | 0.51 | | |

n.s.: no significance; *P<.05 **<.01 ***P<.001

Data analysis results: One-way ANOVA (continuous)

| Items | | Post | N | Mean | SD | F value | Scheffé |
|--------|---|-------|-----|------|------|---------|---------|
| Q15.6 | 1 | EdA | 105 | 3.41 | 0.60 | 0.73 | p>.05 |
| | 2 | JHSP | 69 | 3.49 | 0.56 | | |
| | 3 | PriSP | 198 | 3.48 | 0.53 | | |
| Q15.7 | 1 | EdA | 105 | 3.24 | 0.60 | 0.03 | p>.05 |
| | 2 | JHSP | 69 | 3.22 | 0.62 | | |
| | 3 | PriSP | 197 | 3.22 | 0.56 | | |
| Q15.8 | 1 | EdA | 105 | 3.21 | 0.51 | 1.00 | p>.05 |
| | 2 | JHSP | 70 | 3.10 | 0.54 | | |
| | 3 | PriSP | 196 | 3.19 | 0.53 | | |
| Q15.9 | 1 | EdA | 105 | 3.41 | 0.53 | 0.08 | p>.05 |
| | 2 | JHSP | 69 | 3.43 | 0.53 | | |
| | 3 | PriSP | 199 | 3.43 | 0.51 | | |
| Q15.10 | 1 | EdA | 105 | 3.39 | 0.53 | 0.81 | p>.05 |
| | 2 | JHSP | 70 | 3.41 | 0.55 | | |
| | 3 | PriSP | 196 | 3.33 | 0.52 | | |
| Q15.11 | 1 | EdA | 104 | 3.29 | 0.62 | 0.10 | p>.05 |
| | 2 | JHSP | 70 | 3.33 | 0.53 | | |
| | 3 | PriSP | 196 | 3.31 | 0.58 | | |
| Q15.12 | 1 | EdA | 105 | 3.23 | 0.58 | 0.15 | p>.05 |
| | 2 | JHSP | 70 | 3.27 | 0.51 | | |
| | 3 | PriSP | 195 | 3.26 | 0.53 | | |
| Q16.1 | 1 | EdA | 103 | 3.12 | 0.69 | 1.52 | p>.05 |
| | 2 | JHSP | 65 | 2.98 | 0.67 | | |
| | 3 | PriSP | 197 | 2.97 | 0.73 | | |
| Q16.2 | 1 | EdA | 102 | 3.27 | 0.57 | 0.18 | p>.05 |
| | 2 | JHSP | 65 | 3.29 | 0.52 | | |
| | 3 | PriSP | 197 | 3.31 | 0.56 | | |
| Q16.3 | 1 | EdA | 96 | 3.45 | 0.60 | 0.96 | p>.05 |
| | 2 | JHSP | 64 | 3.34 | 0.57 | | |
| | 3 | PriSP | 193 | 3.35 | 0.60 | | |
| Q17.1 | 1 | EdA | 98 | 3.14 | 0.69 | 1.07 | p>.05 |
| | 2 | JHSP | 65 | 3.03 | 0.64 | | |
| | 3 | PriSP | 192 | 3.02 | 0.75 | | |
| Q17.2 | 1 | EdA | 98 | 3.26 | 0.54 | 0.02 | p>.05 |
| | 2 | JHSP | 64 | 3.25 | 0.50 | | |
| | 3 | PriSP | 190 | 3.24 | 0.59 | | |
| Q17.3 | 1 | EdA | 98 | 3.39 | 0.60 | 2.09 | p>.05 |
| | 2 | JHSP | 63 | 3.35 | 0.57 | | |
| | 3 | PriSP | 190 | 3.24 | 0.62 | | |
| Q18 | 1 | EdA | 110 | 3.61 | 0.51 | 1.62 | p>.05 |
| | 2 | JHSP | 70 | 3.57 | 0.58 | | |
| | 3 | PriSP | 205 | 3.68 | 0.47 | | |
| Q19 | 1 | EdA | 108 | 3.52 | 0.60 | 2.44 | p>.05 |
| | 2 | JHSP | 71 | 3.54 | 0.53 | | |
| | 3 | PriSP | 206 | 3.65 | 0.50 | | |
| Q20 | 1 | EdA | 109 | 2.72 | 0.78 | 2.73 | p>.05 |
| | 2 | JHSP | 71 | 2.80 | 0.82 | | |
| | 3 | PriSP | 206 | 2.93 | 0.81 | | |

n.s.: no significance; *P<.05 **<.01 ***P<.001

Data analysis results: One-way ANOVA (continuous)

| Items | | Post | N | Mean | SD | F value | Scheffé |
|-------|---|-------|-----|------|------|---------|---------|
| Q21 | 1 | EdA | 109 | 3.35 | 0.53 | 2.30 | n.s. |
| | 2 | JHSP | 71 | 3.17 | 0.63 | | |
| | 3 | PriSP | 205 | 3.24 | 0.57 | | |
| Q22.1 | 1 | EdA | 110 | 3.31 | 0.54 | 1.82 | n.s. |
| | 2 | JHSP | 71 | 3.17 | 0.45 | | |
| | 3 | PriSP | 196 | 3.21 | 0.54 | | |
| Q22.2 | 1 | EdA | 110 | 3.54 | 0.55 | 7.37*** | 1 > 2,3 |
| | 2 | JHSP | 71 | 3.31 | 0.47 | | |
| | 3 | PriSP | 196 | 3.31 | 0.52 | | |
| Q22.3 | 1 | EdA | 110 | 3.52 | 0.52 | 0.56 | n.s. |
| | 2 | JHSP | 71 | 3.55 | 0.50 | | |
| | 3 | PriSP | 198 | 3.58 | 0.49 | | |
| Q22.4 | 1 | EdA | 109 | 3.43 | 0.52 | 0.80 | n.s. |
| | 2 | JHSP | 71 | 3.34 | 0.48 | | |
| | 3 | PriSP | 195 | 3.41 | 0.49 | | |
| Q22.5 | 1 | EdA | 109 | 3.29 | 0.51 | 1.08 | n.s. |
| | 2 | JHSP | 71 | 3.27 | 0.53 | | |
| | 3 | PriSP | 195 | 3.36 | 0.50 | | |
| Q23.1 | 1 | EdA | 107 | 3.02 | 0.70 | 7.87*** | 3 > 1 |
| | 2 | JHSP | 71 | 3.13 | 0.56 | | |
| | 3 | PriSP | 198 | 3.33 | 0.70 | | |
| Q23.2 | 1 | EdA | 109 | 3.20 | 0.64 | 0.80 | n.s. |
| | 2 | JHSP | 71 | 3.30 | 0.54 | | |
| | 3 | PriSP | 199 | 3.28 | 0.57 | | |
| Q23.3 | 1 | EdA | 109 | 3.22 | 0.61 | 3.50* | n.s. |
| | 2 | JHSP | 71 | 3.01 | 0.57 | | |
| | 3 | PriSP | 195 | 3.06 | 0.57 | | |
| Q24 | 1 | EdA | 111 | 3.49 | 0.55 | 1.41 | n.s. |
| | 2 | JHSP | 71 | 3.45 | 0.50 | | |
| | 3 | PriSP | 202 | 3.56 | 0.52 | | |
| Q25 | 1 | EdA | 111 | 3.41 | 0.56 | 2.08 | n.s. |
| | 2 | JHSP | 70 | 3.43 | 0.53 | | |
| | 3 | PriSP | 202 | 3.52 | 0.52 | | |
| Q26 | 1 | EdA | 111 | 3.51 | 0.52 | 2.19 | n.s. |
| | 2 | JHSP | 70 | 3.36 | 0.48 | | |
| | 3 | PriSP | 202 | 3.49 | 0.53 | | |
| Q28.1 | 1 | EdA | 113 | 3.66 | 0.47 | 1.45 | n.s. |
| | 2 | JHSP | 71 | 3.52 | 0.58 | | |
| | 3 | PriSP | 202 | 3.60 | 0.58 | | |
| Q28.2 | 1 | EdA | 111 | 3.44 | 0.55 | 1.10 | n.s. |
| | 2 | JHSP | 71 | 3.31 | 0.58 | | |
| | 3 | PriSP | 196 | 3.37 | 0.64 | | |
| Q28.3 | 1 | EdA | 113 | 3.58 | 0.50 | 0.14 | n.s. |
| | 2 | JHSP | 71 | 3.59 | 0.50 | | |
| | 3 | PriSP | 202 | 3.56 | 0.55 | | |
| Q28.4 | 1 | EdA | 113 | 3.43 | 0.53 | 1.17 | n.s. |
| | 2 | JHSP | 71 | 3.41 | 0.50 | | |
| | 3 | PriSP | 200 | 3.51 | 0.54 | | |

n.s.: no significance; *P<.05 **<.01 ***P<.001

Data analysis results: One-way ANOVA (continuous)

| Items | | Post | N | Mean | SD | F value | Scheffé |
|-------|---|-------|-----|------|------|---------|---------|
| Q28.5 | 1 | EdA | 110 | 3.39 | 0.58 | 1.03 | n.s. |
| | 2 | JHSP | 70 | 3.29 | 0.49 | | |
| | 3 | PriSP | 196 | 3.39 | 0.58 | | |
| Q29 | 1 | EdA | 106 | 3.52 | 0.57 | 2.18 | p>.05 |
| | 2 | JHSP | 71 | 3.45 | 0.50 | | |
| | 3 | PriSP | 196 | 3.60 | 0.56 | | |
| Q31 | 1 | EdA | 113 | 3.36 | 0.66 | 1.01 | p>.05 |
| | 2 | JHSP | 72 | 3.24 | 0.57 | | |
| | 3 | PriSP | 202 | 3.35 | 0.65 | | |
| Q32 | 1 | EdA | 112 | 3.46 | 0.50 | 0.86 | p>.05 |
| | 2 | JHSP | 71 | 3.35 | 0.48 | | |
| | 3 | PriSP | 198 | 3.42 | 0.54 | | |
| Q33.1 | 1 | EdA | 108 | 3.36 | 0.54 | 2.16 | p>.05 |
| | 2 | JHSP | 66 | 3.24 | 0.43 | | |
| | 3 | PriSP | 193 | 3.23 | 0.55 | | |
| Q33.2 | 1 | EdA | 108 | 3.50 | 0.52 | 0.27 | p>.05 |
| | 2 | JHSP | 66 | 3.52 | 0.50 | | |
| | 3 | PriSP | 195 | 3.54 | 0.51 | | |
| Q33.3 | 1 | EdA | 108 | 3.39 | 0.54 | 2.17 | p>.05 |
| | 2 | JHSP | 65 | 3.40 | 0.52 | | |
| | 3 | PriSP | 194 | 3.51 | 0.54 | | |
| Q33.4 | 1 | EdA | 108 | 3.43 | 0.52 | 0.69 | p>.05 |
| | 2 | JHSP | 66 | 3.39 | 0.49 | | |
| | 3 | PriSP | 192 | 3.47 | 0.53 | | |
| Q33.5 | 1 | EdA | 108 | 3.31 | 0.52 | 0.99 | p>.05 |
| | 2 | JHSP | 65 | 3.20 | 0.47 | | |
| | 3 | PriSP | 191 | 3.28 | 0.53 | | |
| Q33.6 | 1 | EdA | 107 | 3.10 | 0.55 | 1.84 | p>.05 |
| | 2 | JHSP | 63 | 2.92 | 0.58 | | |
| | 3 | PriSP | 192 | 3.02 | 0.64 | | |
| Q34 | 1 | EdA | 113 | 3.29 | 0.56 | 1.30 | p>.05 |
| | 2 | JHSP | 72 | 3.28 | 0.54 | | |
| | 3 | PriSP | 206 | 3.37 | 0.52 | | |
| Q35 | 1 | EdA | 113 | 3.33 | 0.60 | 0.97 | n.s. |
| | 2 | JHSP | 71 | 3.21 | 0.53 | | |
| | 3 | PriSP | 205 | 3.28 | 0.53 | | |
| Q36.1 | 1 | EdA | 109 | 3.24 | 0.56 | 1.75 | n.s. |
| | 2 | JHSP | 69 | 3.35 | 0.48 | | |
| | 3 | PriSP | 200 | 3.36 | 0.55 | | |
| Q36.2 | 1 | EdA | 109 | 3.28 | 0.52 | 0.27 | n.s. |
| | 2 | JHSP | 70 | 3.21 | 0.56 | | |
| | 3 | PriSP | 201 | 3.26 | 0.56 | | |
| Q36.3 | 1 | EdA | 109 | 3.45 | 0.57 | 0.59 | n.s. |
| | 2 | JHSP | 70 | 3.39 | 0.49 | | |
| | 3 | PriSP | 200 | 3.38 | 0.56 | | |
| Q36.4 | 1 | EdA | 109 | 3.39 | 0.54 | 1.24 | n.s. |
| | 2 | JHSP | 70 | 3.30 | 0.57 | | |
| | 3 | PriSP | 200 | 3.29 | 0.63 | | |

n.s.: no significance; *P<.05 **<.01 ***P<.001

Data analysis results: One-way ANOVA (continuous)

| Items | | Post | N | Mean | SD | F value | Scheffé |
|-------|---|-------|-----|------|------|----------|----------------|
| Q36.5 | 1 | EdA | 108 | 3.26 | 0.59 | 1.30 | n.s. |
| | 2 | JHSP | 69 | 3.30 | 0.58 | | |
| | 3 | PriSP | 198 | 3.18 | 0.61 | | |
| Q37.1 | 1 | EdA | 102 | 3.36 | 0.52 | 3.08* | 1 > 3 |
| | 2 | JHSP | 70 | 3.24 | 0.49 | | |
| | 3 | PriSP | 198 | 3.19 | 0.61 | | |
| Q37.2 | 1 | EdA | 102 | 3.42 | 0.57 | 0.65 | n.s. |
| | 2 | JHSP | 70 | 3.33 | 0.47 | | |
| | 3 | PriSP | 201 | 3.41 | 0.59 | | |
| Q37.3 | 1 | EdA | 102 | 3.55 | 0.57 | 1.42 | n.s. |
| | 2 | JHSP | 68 | 3.50 | 0.50 | | |
| | 3 | PriSP | 197 | 3.43 | 0.62 | | |
| Q38 | 1 | EdA | 107 | 3.35 | 0.58 | 1.98 | p>.05 |
| | 2 | JHSP | 71 | 3.30 | 0.52 | | |
| | 3 | PriSP | 203 | 3.43 | 0.54 | | |
| Q39 | 1 | EdA | 109 | 3.28 | 0.58 | 2.16 | p>.05 |
| | 2 | JHSP | 70 | 3.33 | 0.50 | | |
| | 3 | PriSP | 204 | 3.41 | 0.52 | | |
| Q40.1 | 1 | EdA | 107 | 3.12 | 0.68 | 1.25 | p>.05 |
| | 2 | JHSP | 69 | 2.99 | 0.53 | | |
| | 3 | PriSP | 196 | 3.02 | 0.66 | | |
| Q40.2 | 1 | EdA | 108 | 3.29 | 0.55 | 0.48 | p>.05 |
| | 2 | JHSP | 71 | 3.34 | 0.51 | | |
| | 3 | PriSP | 196 | 3.27 | 0.54 | | |
| Q40.3 | 1 | EdA | 108 | 3.55 | 0.59 | 0.85 | p>.05 |
| | 2 | JHSP | 71 | 3.45 | 0.60 | | |
| | 3 | PriSP | 198 | 3.47 | 0.53 | | |
| Q41 | 1 | EdA | 107 | 3.34 | 0.57 | 2.64 | p>.05 |
| | 2 | JHSP | 72 | 3.40 | 0.55 | | |
| | 3 | PriSP | 204 | 3.48 | 0.51 | | |
| Q42 | 1 | EdA | 110 | 3.29 | 0.55 | 7.03 | n.s. |
| | 2 | JHSP | 72 | 3.50 | 0.50 | | |
| | 3 | PriSP | 204 | 3.52 | 0.53 | | |
| Q43 | 1 | EdA | 111 | 3.14 | 0.64 | 13.02*** | 2 > 1 3 > 1 |
| | 2 | JHSP | 71 | 3.45 | 0.53 | | |
| | 3 | PriSP | 205 | 3.47 | 0.53 | | |
| Q44 | 1 | EdA | 110 | 3.50 | 0.57 | 2.88 | n.s. |
| | 2 | JHSP | 71 | 3.56 | 0.50 | | |
| | 3 | PriSP | 205 | 3.64 | 0.49 | | |
| Q45 | 1 | EdA | 110 | 3.45 | 0.61 | 4.24* | 3 > 1 |
| | 2 | JHSP | 72 | 3.54 | 0.50 | | |
| | 3 | PriSP | 205 | 3.63 | 0.50 | | |
| Q46.1 | 1 | EdA | 111 | 3.33 | 0.75 | 12.18*** | 2 > 1 3 > 1 |
| | 2 | JHSP | 70 | 3.63 | 0.52 | | |
| | 3 | PriSP | 205 | 3.67 | 0.50 | | |
| Q46.2 | 1 | EdA | 111 | 3.53 | 0.58 | 0.71 | n.s. |
| | 2 | JHSP | 70 | 3.44 | 0.50 | | |
| | 3 | PriSP | 205 | 3.53 | 0.54 | | |

n.s.: no significance; *P<.05 **<.01 ***P<.001

Data analysis results: One-way ANOVA (continuous)

| Items | | Post | N | Mean | SD | F value | Scheffé |
|-------|---|-------|-----|------|------|----------|--------------|
| Q46.3 | 1 | EdA | 108 | 3.52 | 0.56 | 0.19 | n.s. |
| | 2 | JHSP | 71 | 3.46 | 0.50 | | |
| | 3 | PriSP | 203 | 3.49 | 0.60 | | |
| Q46.4 | 1 | EdA | 110 | 3.31 | 0.59 | 1.74 | n.s. |
| | 2 | JHSP | 68 | 3.16 | 0.59 | | |
| | 3 | PriSP | 200 | 3.18 | 0.68 | | |
| Q46.5 | 1 | EdA | 109 | 3.24 | 0.65 | 1.05 | n.s. |
| | 2 | JHSP | 68 | 3.28 | 0.57 | | |
| | 3 | PriSP | 199 | 3.34 | 0.61 | | |
| Q46.6 | 1 | EdA | 108 | 3.24 | 0.58 | 0.31 | n.s. |
| | 2 | JHSP | 71 | 3.20 | 0.60 | | |
| | 3 | PriSP | 201 | 3.18 | 0.71 | | |
| Q47 | 1 | EdA | 112 | 3.48 | 0.58 | 0.95 | p>.05 |
| | 2 | JHSP | 70 | 3.37 | 0.52 | | |
| | 3 | PriSP | 205 | 3.44 | 0.50 | | |
| Q48 | 1 | EdA | 113 | 3.09 | 0.76 | 9.84*** | 2>1 3>1 |
| | 2 | JHSP | 71 | 3.39 | 0.64 | | |
| | 3 | PriSP | 207 | 3.42 | 0.58 | | |
| Q49 | 1 | EdA | 113 | 3.36 | 0.58 | 2.79 | n.s. |
| | 2 | JHSP | 71 | 3.51 | 0.53 | | |
| | 3 | PriSP | 206 | 3.50 | 0.52 | | |
| Q50 | 1 | EdA | 111 | 3.23 | 0.68 | 4.59* | 2>1 3>1 |
| | 2 | JHSP | 72 | 3.50 | 0.63 | | |
| | 3 | PriSP | 203 | 3.42 | 0.66 | | |
| Q51.1 | 1 | EdA | 103 | 2.98 | 0.77 | 1.00 | n.s. |
| | 2 | JHSP | 68 | 2.97 | 0.71 | | |
| | 3 | PriSP | 192 | 2.86 | 0.76 | | |
| Q51.2 | 1 | EdA | 102 | 2.79 | 0.72 | 6.79** | 2>1 3>1 |
| | 2 | JHSP | 69 | 3.17 | 0.75 | | |
| | 3 | PriSP | 189 | 3.06 | 0.72 | | |
| Q51.3 | 1 | EdA | 102 | 2.88 | 0.79 | 10.53*** | 2>1 3>1 |
| | 2 | JHSP | 68 | 3.25 | 0.66 | | |
| | 3 | PriSP | 190 | 3.25 | 0.64 | | |
| Q51.4 | 1 | EdA | 105 | 3.42 | 0.65 | 1.02 | n.s. |
| | 2 | JHSP | 70 | 3.50 | 0.61 | | |
| | 3 | PriSP | 193 | 3.37 | 0.65 | | |
| Q51.5 | 1 | EdA | 104 | 3.26 | 0.65 | 0.33 | n.s. |
| | 2 | JHSP | 68 | 3.26 | 0.56 | | |
| | 3 | PriSP | 192 | 3.21 | 0.64 | | |
| Q52 | 1 | EdA | 112 | 3.38 | 0.60 | 0.03 | p>.05 |
| | 2 | JHSP | 71 | 3.39 | 0.55 | | |
| | 3 | PriSP | 206 | 3.38 | 0.53 | | |
| Q53 | 1 | EdA | 110 | 3.01 | 0.67 | 43.25*** | 2>1 3>1,2 |
| | 2 | JHSP | 72 | 3.43 | 0.58 | | |
| | 3 | PriSP | 205 | 3.63 | 0.50 | | |

n.s.: no significance; *P<.05 **<.01 ***P<.001

Data analysis results of Chi-Square Test for Q9, Q10, Q13, Q27, Q30

Chi-square test for Q9: the way of employment of advisers

| Items | | full-time | | part-time | | Other forms | | Sum | | χ^2 |
|-------|-------|-----------|------|-----------|------|-------------|-----|-----|-----|----------|
| | | N | % | N | % | N | % | N | % | |
| Post | EdA | 48 | 42.5 | 56 | 49.6 | 9 | 8.0 | 113 | 100 | 9.26 |
| | JHSP | 38 | 53.5 | 30 | 42.3 | 3 | 4.2 | 71 | 100 | |
| | PriSP | 118 | 58.1 | 79 | 38.9 | 6 | 3.0 | 203 | 100 | |
| Total | | 204 | 52.7 | 165 | 42.6 | 18 | 4.7 | 387 | 100 | p>.05 |

Chi-square test for Q10: the adviser selection and appointment for the principals

| Items | | Education Bureau | | Local Education Committees | | Principal Selection Committees | | School Parents' Committees | | Other forms | | Sum | | χ^2 |
|-------|-------|------------------|------|----------------------------|------|--------------------------------|------|----------------------------|-----|-------------|-----|-----|-----|----------|
| | | N | % | N | % | N | % | N | % | N | % | N | % | |
| Post | EdA | 69 | 69.0 | 16 | 16.0 | 9 | 9.0 | 0 | 0.0 | 6 | 6.0 | 100 | 100 | 13.52 |
| | JHSP | 41 | 66.1 | 16 | 25.8 | 4 | 6.5 | 1 | 1.6 | 0 | 0.0 | 62 | 100 | |
| | PriSP | 105 | 57.4 | 39 | 21.3 | 30 | 16.4 | 2 | 1.1 | 7 | 3.8 | 183 | 100 | |
| Total | | 215 | 62.3 | 71 | 20.6 | 43 | 12.5 | 3 | 0.9 | 13 | 3.8 | 345 | 100 | p>.05 |

Chi-square test for Q13: the responsibility of payment for advisers

| Items | | MOE | | Local governments | | Schools | | Other forms | | Sum | | χ^2 |
|-------|-------|-----|------|-------------------|------|---------|-----|-------------|-----|-----|-----|----------|
| | | N | % | N | % | N | % | N | % | N | % | |
| Post | EdA | 51 | 48.6 | 51 | 48.6 | 0 | 0.0 | 3 | 2.9 | 105 | 100 | 4.89 |
| | JHSP | 31 | 45.6 | 35 | 51.5 | 0 | 0.0 | 2 | 2.9 | 68 | 100 | |
| | PriSP | 102 | 52.6 | 90 | 46.4 | 1 | 0.5 | 1 | 0.5 | 194 | 100 | |
| Total | | 184 | 50.1 | 176 | 48.0 | 1 | 0.3 | 6 | 1.6 | 367 | 100 | p>.05 |

Chi-square test for Q27: the number of annual performance objective setting

| Items | | 1-3 items | | 3-5 items | | 5-7 items | | Decided after Consulting with the advise | | Sum | | χ^2 |
|-------|-------|-----------|------|-----------|------|-----------|------|--|------|-----|-----|----------|
| | | N | % | N | % | N | % | N | % | N | % | |
| Post | EdA | 8 | 7.8 | 33 | 32.0 | 21 | 20.4 | 41 | 39.8 | 103 | 100 | 7.77 |
| | JHSP | 11 | 16.9 | 17 | 26.2 | 7 | 10.8 | 30 | 46.2 | 65 | 100 | |
| | PriSP | 30 | 16.2 | 56 | 30.3 | 26 | 14.1 | 73 | 39.5 | 185 | 100 | |
| Total | | 49 | 13.9 | 106 | 30.0 | 54 | 15.3 | 144 | 40.8 | 353 | 100 | p>.05 |

Chi-square test for Q30: the frequency of interaction between advisers and principals

| Items | | at least once a week | | at least twice a month | | at least once a month | | At least once every two months | | decided through consultation between both | | Sum | | χ^2 |
|-------|-------|----------------------|------|------------------------|-------|-----------------------|-------|--------------------------------|-------|---|-------|-----|-----|----------|
| | | N | % | N | % | N | % | N | % | N | % | N | % | |
| Post | EdA | 3 | 2.83 | 23 | 21.70 | 52 | 49.06 | 9 | 8.49 | 19 | 17.92 | 106 | 100 | 8.22 |
| | JHSP | 1 | 1.49 | 9 | 13.43 | 28 | 41.79 | 9 | 13.43 | 20 | 29.85 | 67 | 100 | |
| | PriSP | 4 | 2.08 | 32 | 16.67 | 77 | 40.10 | 25 | 13.02 | 54 | 28.13 | 192 | 100 | |
| Total | | 8 | 2.14 | 67 | 17.91 | 160 | 42.78 | 43 | 11.50 | 96 | 25.67 | 374 | 100 | p>.05 |

